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ABSTRACT

This manual is designed as a resource for trainers who provide preservice training, either in-country or state-side, to health specialists and generalists assigned to health projects at the community and clinical levels. The training is intended to assist the volunteer in developing knowledge and skill in the areas of primary health care and the complementary skills, knowledge, and attitudes necessary to work cooperatively with others. This volume contains the first four modules. Each module begins with a set of behavioral objectives and contains a sequence of sessions that address the specific context area. Each session follows this format: total time, overview, objectives, list of resources, a list of required materials, and procedures (a series of steps to follow to meet the objectives) with accompanying trainer notes. Handouts for trainees and trainer attachments (trainer resources) follow most sessions. Module titles (and representative session titles) are climate setting and assessment (sharing perspectives of health, general assessment); primary health care (delivery systems, role of the Peace Corps volunteer, factors affecting health, monitoring); community analysis and organization (deciding what to do about the community, learning about the community, working with the community); and health education (identifying priority health problems, writing objectives, instructional materials). (YLB)

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TRAINING FOR DEVELOPMENT

ED307487

Technical Health Training Manual

Vol. 1

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Peace Corps

TECHNICAL HEALTH TRAINING MANUAL

Volume I

Prepared for Peace Corps by

CHP INTERNATIONAL

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Oak Park, Illinois

March, 1985

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Save The Children

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INTRODUCTION

The Technical Health Training Manual (THTM) is part of a long-standing Peace Corps effort to provide supportive material for the technical training of volunteers in a wide range of health areas. It contains a set of sessions upon which a comprehensive health training program can be built. The manual was conceived as a response to a need for a generic approach to health volunteer training which would:

- reflect an understanding of the role of the Peace Corps health worker in the context of providing primary health care (PHC) in the developing world.
- be sufficiently flexible and adaptable for use in Peace Corps countries world-wide.
- address the needs of participants with varying degrees of health knowledge and work experience.
- consider important field realities such as variations in the length of technical training or accessibility of a local community for application of training.
- allow for the integration of technical and other training components to promote the attainment of well-rounded development skills.

A central theme of this training manual is the recognition that technical expertise is significant and useful only when it is applied in balance with other abilities. A person technically competent in disease control is of little value to the community unless he or she has the ability to work cooperatively with others to motivate them toward a more self-reliant and healthy life. It is essential that Peace Corps Volunteers and Host Country Counterparts develop a variety of complementary skills, knowledge and attitudes that will serve to weave together the many threads of community development. Therefore, two primary goals of the manual can be identified:

1. To assist the Volunteer in developing knowledge and skill in the areas of primary health care.
2. To help the Volunteer develop the complementary skills, knowledge and attitudes necessary to work cooperatively with Counterparts and community members in designing health education strategies that meet the needs of the people.

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The training program outlined in this manual emphasizes the parallels which exist between training and community-based development work in primary health care. Throughout the program, participants are encouraged to take a full and active role in their own education and to make decisions that will affect them and the people with whom they work and live. They are urged to cooperate with others, to identify and use available talents and resources, and to practice skills that help motivate people and involve them in the process of their own education.

TRAINER'S GUIDE

The _Trainer's_ _Guide_ explains the basic purpose and structure of the manual and guides you, the trainer, in using the sessions effectively to meet health training objectives.

I. Purpose of the Manual

The manual is designed as a resource to be used by trainers primarily in providing pre-service training (either in-country or state-side) to health specialists and generalists assigned to health projects at the community and clinical levels. Such projects are usually categorized within the program areas of:

Health Education

Maternal and Child Health

Nutrition

Disease Control

Community Health (which usually consists of some combination of the above mentioned areas).

These areas are all integrated and considered within the scope of primary health care with a focus on alleviating health problems and meeting health needs at the local level.

The manual is useful in providing:

- In-service training to nurses and health generalists.
- a measure of health training to Volunteers assigned to projects in the following areas:

  school health education
  water/sanitation
  home economics
  health personnel development
  rural development

- training of Volunteers in other development sectors to assist in meeting local health needs (e.g. through secondary health activities)
- staff training

II. Assumptions of the Manual

The Technical Health Training Manual, like other Peace Corps training manuals, reflects assumptions which are made about the PCV as a development worker.

The following assumptions were adapted from The Role of the Volunteer In Development (Core Curriculum, Peace Corps) and apply to the PCV as a development worker in the area of primary health care:

Self Sufficiency:
Peace Corps Volunteers are essentially working in the conduct of development-related projects to help others gain increasing self sufficiency. This is the goal and philosophy of development within which Peace Corps projects and Volunteer roles are defined.

Skill Transfer and Role Model:
Given the self sufficiency assumption, PCV's are assigned to a role in which the skills they possess are transferred to others enabling local people to continue to solve problems. Within the constraints of project definition, Volunteers are therefore expected to act as role models for effective helping, working with others as opposed to doing for others.

Training as the Example:
We learn to train others the way we are trained. If training is structured to "spoon feed" answers, trainees will tend to adapt this as a development approach. The sessions in this manual are therefore designed to promote critical thinking, personal responsibility, active problem solving, and thorough analysis of information. This approach may be different from traditional educational models and will require flexibility, commitment, and patience on the part of trainers and trainees.

Problem Solving and Project Management:
The process of development requires skill in solving problems and managing work. Most volunteer assignments require that Volunteers manage themselves, often with minimal supervision. They are required to set goals, define tasks, and plan their day by day activities. If Volunteers are able to solve problems and manage themselves, they will possess a skill directly related to development work.

Gathering and Using Information:
All development work involves the use of information. How information is gathered, sorted, filtered, verified, and put to use is critical to the process of understanding and defining development problems.

Role Definition:
An understanding of the previous assumptions and the ability to act on them provides a sense of mission, direction, and a role for the Volunteer. This is especially true when "development work skills" are linked with technical skills (or a work identity such as health worker, extension worker, teacher).

The health volunteer's role in relation to primary health care and development is focused on throughout the manual.

III. Training Modules and Sessions

The Technical Health Manual is divided into Volume I and Volume II. Each volume has sections, called modules, which focus on interrelated health content areas. Each module begins with a set of behavioral objectives and contains a sequence of sessions which address the specific context area. The modular format allows the trainer to combine various modules and sessions as needed given training objectives, time limitations, and other program parameters.

The modules and the sessions within each, are as follows:

VOLUME I

Module I Climate Setting & Assessment

Session 1:	Sharing Perceptions of Primary Health Care
Session 2:	General Assessment
Session 3:	Defining The Training Course Objectives
Session 4:	Training Program Evaluation

Module II Primary Health Care

Session 5:	Primary Health Care
Session 6:	Health Care Delivery Systems
Session 7:	The Role of the Peace Corps Volunteer in Primary Health Care
Session 8:	Factors Affecting Health
Session 9:	Monitoring

Module III Community Analysis and Organization

Session 10: Deciding What To Learn About A Community
Session 11: Methods For Learning About The Community
Session 12: Learning About The Community
Session 13: Community Analysis
Session 14: Working With The Community
Session 15: Organizing A Health Committee
Session 16: Working As A Counterpart
Session 17: Health Day

Module IV Health Education

Session 18: Introduction To Health Education
Session 19: Identifing and Analyzing Priority Health Problems
Session 20: Writing Objectives For Health Education
Session 21: Planning and Evaluating Health Education Projects
Session 22: Selecting and Using Nonformal Education Techniques
Session 23: Selecting and Using Visual Aids
Session 24: Adapting and Pretesting Health Education Materials
Session 25: Designing and Evaluating Health Education Sessions
Session 26: Resources For Health Education
Session 27: Practicing and Evaluating Health Education Sessions

VOLUME II

Module V Nutrition

Session 28: Foods and Nutrition
Session 29: Recognizing Malnutrition
Session 30: Breastfeeding and Weaning
Session 31: Preventing Malnutrition

Module VI Maternal and Child Health

Session 32: Normal Pregnancy and Pre-Natal Care
Session 33: High Risk Pregnancy
Session 34: Well Baby Care
Session 35: Healthier Families Through Child Spacing

Module VII Disease In The Developing World

Session 36: Recognition of Immunizable Diseases
Session 37: Transmission of Immunizable Diseases

Session 38:	Preventing and Controlling The Spread of Immunizable Diseases
Session 39:	Dehydration Assessment
Session 40:	Rehydration Therapy
Session 41:	Treatment, Prevention and Control of Selected Endemic Diseases
Session 42:	Improving Health Through Safe Water and A Clean Community

Individually and collectively, training sessions in the manual focus on basic health knowledge and/or skills which most community based health workers should acquire.

For pre-service training, Volume I with modules in Primary Health Care, Community Analysis and Organization, and Health Education are considered fundamental and essential in helping Trainees to develop basic communication and planning skills required in development work. Volume II contains the modules in the three technical areas. The selection of sessions from these modules should be based on country-specific technical programming, experience and needs of the Trainees.

The sample training schedule on page 18 presents one possible way to sequence the modules and session. It is included only as an example.

Since most pre-service training programs consist of technical language and cross-cultural/development training, the sessions in this manual include frequent cross-referencing. For example, the sessions in Module 3 on Community Analysis include a reference to and should be closely coordinated with cross-cultural training activities. The cross-referencing is meant to help the trainer recognize overlap and interface among training components. Making use of these references and suggestions will greatly enhance the opportunities for integrated training.

All of the sessions in the manual follow a consistent format which is briefly explained on the following pages. As there are often several purposes to each session, it is important for the trainer to study and understand the multi-tiered design of each session before conducting it. For example, the activities may provide skill development on malaria and also provide participants with practice in nonformal education methods and materials development. The trainer should be conscious of each of these objectives and assist participants in accomplishing them.

Three and four-hour sessions have breaks indicated in logical places in the sequence of activities. Shorter sessions include an allowance in the total time of approximately 5 minutes of break time per hour of session time. Please note that this allowance for break time is already programmed into each session. As the modules and sessions are modified, the trainer should always work in 5 minutes of break time for each hour of training. The trainer should decide when the actual breaks occur.

Session Format

Session Number

TITLE

TOTAL TIME	The total time scheduled for the session.
OVERVIEW	A brief statement on how the session relates to the overall training program, the activities in the session, and the expected learning outcomes.
OBJECTIVES	Statements of what is expected of participants in order to successfully complete the training course.
RESOURCES	Printed materials needed for the session or useful for background information and available to Peace Corps staff and Volunteers through ICE. Handouts follow most sessions. Each handout is coded to the corresponding session and paginated. Copies of handouts should be made in advance for distribution to trainees as specified in the session. Trainer Attachments are also coded and follow some sessions. These are intended as resources for the trainer and are sometimes to be shared with participants who help with session preparation.
MATERIALS	Supplies and tools needed for the session.
PROCEDURE	A series of steps to follow in order to meet the objectives of the session.

Trainer Note

Notes to further explain the activities of the session. These include such things as alternatives, scheduling considerations, suggestions and further directions to the trainer.

IV. Training Methodology

As designed, the Health Manual can be considered a modified "competency-based" training. It aims to help trainees attain and demonstrate health knowledge and skills (i.e. competencies) required of them on the job. "Competencies" to be achieved are stated as behavioral training objectives at the beginning of each module. These objectives were developed based on a detailed review and analysis of the tasks performed by Volunteers working in specific health areas.

At the beginning of the training, the trainers should provide participants with a complete list of those behavioral objectives they will be expected to achieve by the end of the program. Session 3 includes an activity in which trainers and trainees examine clarify and modify the training objectives and design to meet group expectations.

For assessing how well they have accomplished the objectives, trainees should be given a variety of opportunities throughout the program to demonstrate practical application of acquired knowledge/skills.

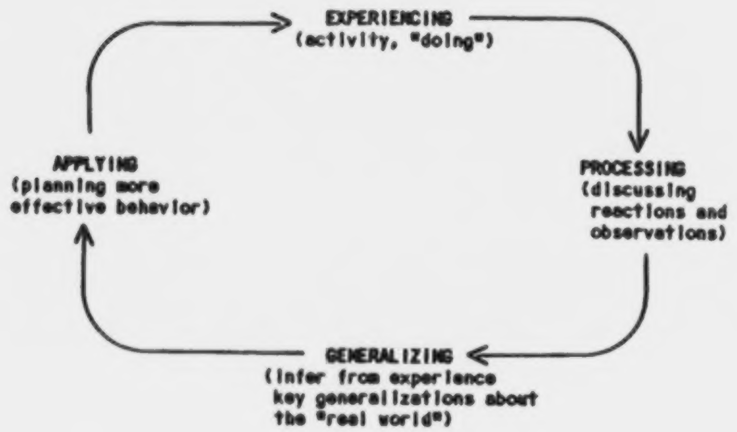
It is useful to note here that each of the sessions includes one to four "learning objectives". For the purposes of this manual, a learning objective is defined as a sub-objective or intermediate objective that describes what the trainee is doing along the way toward accomplishing the behavioral objective. The behavioral objective is terminal; it describes what the trainee will be able to do by the end of the training program.

The trainer can best facilitate trainees' acquisition of specific competencies by utilizing the experiential learning model. This approach to training includes a focus on learner-centered adult education and emphasizes in particular:

- the role of the trainer as facilitator of learning (rather than only as provider of information).
- the use of a variety of educational methods in meeting individual learning needs.
- learning goals, objectives, and activities which relate trainees' previous knowledge/skills to that acquired during training and its application to the job.
- the assumption of responsibility by trainees for their own learning.

- the active participation of trainees in activities aimed at meeting learning objectives.

Experiential learning is exactly what the name implies - learning from experience. Effective training strategies which incorporate experiential learning approaches, build upon this precept by providing learners with situations/settings/environments that stimulate the process of experiencing. Within the context of a training curriculum, learning experiences in these situations may take the form of classroom activities, simulations, or "real life" activities. Experiential learning occurs when a person engages in an activity, reviews the activity critically, abstracts some useful insight from the analysis, and applies the result in a practical situation. The experiential process follows the theoretical cycle shown below:


EXPERIENCING
(activity, "doing")
PROCESSING
(discussing reactions and observations)
GENERALIZING
(infer from experience key generalizations about the "real world")
APPLYING
(planning more effective behavior)

The Health Manual makes use of the experiential learning approach in each session. The kinds of techniques used frequently to actively involve the learners include:

- demonstration
- large group discussion
- small group tasks
- lecturettes
- community visits and interviews
- storytelling
- role play
- simulation
- case studies
- slide shows
- readings
- skills practice

The trainer is encouraged to make use of an even wider range of training techniques to facilitate learning and enable trainees to transfer health knowledge/skills. In facilitating learning, the trainer should also make use of and/or help create "learning environments" which are stimulating, relevant and effective. To the extent possible, the local community and resources (e.g. health personnel/facilities) should be utilized in conducting training.

When adapting the sessions from this manual to fit specific training situations care must be taken to retain all four steps in the experiential learning cycle. For example, if a session needs to be shortened from three hours to two, the trainer should modify the steps such that the trainees can still experience, process, generalize and apply their learnings. Cutting out the application step to shorten the session time is not a viable modification.

For a fuller description of the experiential learning model and other valuable information on training design and delivery, please refer to A Trainers Resource Guide, Peace Corps and Session 25, Designing and Evaluating Health Education Sessions.

V. Use and Adaptation of the Manual

The Manual is meant to serve as a model for the effective design of training sessions which promote a logical flow of learning. It is not meant to be used without first adapting sessions to focus on country-specific health problems the learning needs of trainees in their particular health assignments. Thus, for example, Country-specific health and related cultural information must be included where appropriate.

In preparation for adapting the manual to meet specific training needs, the trainer should conduct the following steps:

1. Identify host country health problems, needs and target groups to be addressed during training.
2. Collect country-specific health and other relevant information.
3. Determine the primary and secondary health functions which the Volunteer is being trained to perform (preferably utilizing a task analysis).
4. Determine the level of health knowledge/skills of the average group to be trained.

5. Outline desired training goals, objectives, content, activities and evaluation.

6. Determine resource needs and the availability of resources (e.g. personnel, materials, facilities, and time).

7. Review existing training manuals, designs and materials to determine their adequacy in meeting training objectives.

8. Select, sequence, and adapt specific sessions to be used in the program.

9. Add to the training design:

   - opening and closing activities (e.g. ice breakers, end-of-training dinner)
   - climate-setting (e.g. sharing expectations, setting the agenda)
   - group process (e.g. feedback sessions)

These steps are fairly standard for the design of any training program and can serve as a general guide. For a more detailed description of training design and organization, please read "The Trainers' Resource Guide" Peace Corps (ICE).

The following subsections address several major considerations in training design and provide ideas for how the manual can be adapted to suit different training situations.

A. Adaptations Based on Trainee Needs and Experience

The more skill, knowledge, and practical experience participants bring, the more effective and enriching are the small group activities that allow them to pool their knowledge and resources to teach each other. The experiential nature of the sessions allows pre-service Trainees to draw on what they bring with them from their experiences in the U.S. (or other parts of the world). They begin with what they already know and apply it to the new culture and work. The trainer can use pre-training questionnaires,and interviews to assess entry level knowledge and skills and to become familiar with the trainees specific needs and expectations.

Once the training is underway,every effort should be made to adapt training activities such that they provide pre-service trainees with experiences and "hands-on" skill practice in the local community and if appropriate in their future workplaces. (For example: participants can pretest visual aids with members of the surrounding community rather than conduct the exercise among themselves in the classroom.)

For cases where health specialists and health generalists are being trained together, the trainer should modify sessions so that the resources of one group are used to benefit the other.

Through well-organized peer-learning and small group discussions, the specialists can contribute their expertise to the skills acquisition of the generalists, while the generalists can help to broaden the community development perspective of the specialists. Throughout the Health Manual, specific reference is made to activities which represent opportunities for peer teaching. For some activities, however, specialists and generalists should be divided into two homogeneous groups and receive separate, more highly-focused training.

B. Adaptations Based On Available Materials and Equipment

It is best to use the kinds of materials and equipment during the training that participants will also have available in their host communities. They may have access to more or less variety of materials and equipment than suggested in the model and sessions should be modified on this basis. For example, you might want to use a film instead of a reading or discussion of a picture because particular health films are available in the country. On the other hand, you may want to substitute drawings or photographs where slides are suggested if slides are not available. Encourage participants to locate possible sources of materials and equipment from various agencies in the country that may be used during the program.

Case studies, examples, stories and pictures should often need to be modified to make them more appropriate for the local situation. If the trainer is not an artist, it is possible that someone in the community who has artistic skills would enjoy helping the staff adapt or design new materials.

C. Adaptations Based on the Size of the Training Group

The session and activities in this manual are designed to accommodate training groups of approximately 20 participants. If you anticipate a significantly larger number of participants, consider dividing them into two subgroups, each with its own technical trainer. If the larger group cannot be broken into smaller groups, then time allowances for many of the activities will have to be extended. This is especially true in sessions which include small group tasks followed by reporting back to the large group.

D. Adaptations For In-Service Training Workshops

Prior to in-service workshops, questionnaires can be administered in the field to identify technical skill levels, perceived needs and current project descriptions of the Volunteers scheduled to participate. During the design stage, the trainer should adjust the sessions so that the "starting point" is the PCV's recent experience in the field working with the community. The generic case studies and examples included in the manual can be replaced with "real" examples provided by the group. In addition, Volunteers can bring to the workshop any visual aids, utensils, local clinic equipment and other items from their communities which would help to make the training as relevant as possible.

E. Adaptations Based on Previous Use of the Manual

Technical and educational information contained in this manual is current at the time of this writing. However, advancing technology means modification will be needed to keep the manual up-to-date. Trainers are encouraged to write notes in the margins of the manual where new information applies or an activity was changed and improved. Also note changes in the time required to conduct the sessions as the session times listed are only estimates. This kind of information will allow for improvement of the training over time.

VI. Resources

In order to allow for broad applicability in a variety of countries, the Technical Health Training Manual has been written generically and has been drawn from a variety of references. The complete collection of materials used in the sessions is listed in the Bibliography at the end of the manual. The primary technical resources are the Supervisory Skills Modules for Controlling Diarrheal Diseases and Guidelines for Training Community Health Volunteers in Nutrition, both from WHO, and the "Training Course for Instructors in Combatting Childhood Communicable Diseases" from CDC. Technical materials from AID, CDC, WHO, and UNICEF have also served as sources of accurate information and case examples.

Primary resources for Module 3, Community Analysis and Organization and Module 4, Health Education are Community Culture and Care, Helping Health Workers Learn, Bridging the Gap, and Teaching and Learning with Visual Aids.

The references, handouts and trainer attachments included with each session should be considered the major resources for the actual training. All of these materials are either available to Peace Corps trainers and Volunteers through the Information Collection and Exchange (ICE) or are attached to the sessions to which they pertain. This has been done to ensure trainers' access to them and for standardization of materials. ICE also provides an annotated listing of available health publications.

In addition to written materials, the trainer should visit local agencies and groups and international organizations and obtain a variety of visual aids and support materials, for use by both trainers and trainees during the program. Training staff should pay attention to the various items identified under "Materials" in each session and locate these at the beginning of the program. Many people find it helpful to photocopy and compile all of the handouts ahead of time to avoid time crunches and machine breakdowns later.

A final, but important note on reference materials:

> In the course of developing this manual, extensive review of published data has revealed a significant variation in some technical information and recommendations. For example, there are several variations in the "correct" amounts of sugars, salt, required for one liter of homemade rehydration solution. These variations represent in some cases a difference in technical perspective and in other cases, outdated

information. As of the final revision of the manual, the technical information presented in all of the sessions is based on the most current and accurate data and guidelines available from WHO and CDC. Great care has been taken to ensure the quality of the technical material included in sessions, handouts, trainer attachments and suggested readings. As with any technical document, however, the content will have to be revised and up-dated in accordance with conclusions drawn from the most recent research.

Trainers and other users of the manual should always check with Peace Corps as well as host country health ministries to revalidate or modify material.

VII Staff Preparation

The Technical Health Training Manual includes detailed session procedures and explanatory trainer notes for the benefit of seasoned as well as less-experienced trainers; following the steps in the sessions however does not guarantee a successful program. The training staff who design and conduct the program outlined here should represent a balance of skill and experience in adult training methodology and experiential learning, and technical expertise in the subject matter. The staff should be flexible and able to "let go" so that the participants are encouraged to take an active role in their education.

In addition to trainers background skills and expertise, program success depends on adequate preparation time. A "training of trainers" workshop should be scheduled before the program, to provide the staff an opportunity to practice their training skills and build a cohesive and supportive team. During the preparation time, trainers should review the designs, prepare lecturettes in the trainer's own words, and have a complete sense of exactly what a session is trying to accomplish. If at all possible, trainers should simulate or rehearse sessions in order to anticipate questions and gain a sense of session flow.

VI Evaluation

Before dealing with the "how to do it" aspect of evaluation, it is useful to discuss first of all "why do it". Often, organizers of training courses neglect evaluation in favor of others technical aspects of the running of a course.

Evaluation is an integral part of every training program and should be designed right from the start of planning. It includes an assessment of the conduct of the program (logistic and administrative organization, and presentation of activities) as well as the outcomes (if the participants have accomplished the objectives).

Evaluation is a learning process which allows both trainers and trainees to:

- Test the knowledge and skills acquired during the course;
- Analyze the effectiveness of the activities used;
- Judge the appropriateness of the educational material used;
- Give participants and trainers a chance to express their criticisms and suggestions.

This evaluation serves to help trainers improve their performance in future programs and to better adapt activities to participant needs and work conditions. In turn, the organization of future courses becomes more efficient.

Constant evaluation during a training program is as important as a final evaluation. Comments, criticisms and suggestions can be solicited during periodic meetings, informal conversations at the day's end, or by way of a suggestions box in the conference hall. These inputs aid trainers in modifying the course as the need arises.

Evaluation Mechanisms Included in the Manual

Several methods for assessing trainee performance and evaluating the training programs are incorporated into the manual. These include:

- Behavioral objectives for each module which state in measurable terms what the participants should be able to do by the end of the segment of training. The trainer can use this to assess participant performance and identify weaknesses in program content or process.
- A pre-test/post-test system which assesses the participants' acquisition of knowledge, and to some extent, attitude change. The pre-test is part of Session 2, General Assessment.

- Participant-led projects and presentations which assess learning and provide participants with the opportunity to immediately apply and practice what they have learned in a "safe" environment. These education events occur throughout the modules and enable trainees to demonstrate both their technical knowledge of primary health care and their teaching skills.

- The Health Day which challenges participants to bring together and apply many of the skills they've learned during the program. The Health Day is a two-day task in planning, organization and implementation, and is usually scheduled as the culminating activity of the training program.

- The program evaluation in Session 4 provides for both a written and verbal discussion of the strengths and weaknesses of the training. If the group is not too large, trainers and trainees can reach a consensus on recommendations for improvements. For training programs of three weeks or more, an evaluation session should be conducted at the mid-point and at the end of the program. In every case, the information and recommendations from these evaluations should be synthesized and included in the trainers end-of-training report to Peace Corps/Washington.

It should be noted that all of these evaluation measures reveal primarily the immediate reactions and changes in knowledge skills and attitudes of participants. The truer test of program effectiveness can only be judged in the field where participants perform their daily tasks. Questionnaires, supervisory visits and evaluation meetings three to six months after the training are means of gaining greater insight into the utility of the course and future training needs of Volunteers.

For more detailed information on evaluation, please refer to Demystifying Evaluation (Clark and McCaffery) and Helping Health Workers Learn.

SAMPLE SEQUENCE OF MODULES AND SESSIONS FOR HEALTH TRAINING PROGRAMS

Opening

Module 1 - Climate Setting and Assessment
Session 1 (Sharing Perceptions of Primary Health Care)
Session 2 (General Assessment)
Session 3 (Defining The Training Course Objectives)

↓

Volunteer In Development

Module 2 - Primary Health Care
Sessions 5 - 8
Module 3 - Community Analysis & Organization
Sessions 10 - 16

↓

Health Education

Module 4 - Health Education
Sessions 18 - 27

↔

Technical Content Areas

Module 5 - Nutrition
Sessions 28 - 31
Module 6 - Maternal and Child Health
Sessions 32 - 35
Module 7 - Diseases In the Developing World
Sessions 36 - 42
Module 2 - Primary Health Care
Session 9 (Monitoring)

↓

Closing Sessions

Module 2 - Community Analysis & Organization
Session 17 (Health Day)
Module 1 - Climate Setting & Assessment
Session 4 (Training Evaluation)

The above outline is one possible way to sequence the sessions in the Health Manual. After several opening activities, the design includes sessions in Primary Health Care (Module 2) and Community Organization and Analysis (Module 3). These sessions help participants understand basic health programming and define their role as development workers in the community. Afterwards, the training focuses on Health Education (Module 4) and the technical content areas (Modules 5, 6, 7). Ideally, the health education module should be interspersed with sessions from one of the technical content modules. The Trainees' particular technical program will determine which of the sessions in Nutrition, MCH, and Disease will be incorporated into the training design and schedule. The training ends with the Health Day and a final evaluation.

Session 1

SHARING PERCEPTIONS OF PRIMARY HEALTH CARE

TOTAL TIME 2 hours

OVERVIEW

Setting a climate of sharing and active participation during the first few days of the program is essential to good training for adults. Just as important, participants and trainers need to come together and begin to establish identity as a group. In this opening activity, participants share their feelings and perceptions about being here in the program and about their future roles as health workers and educators. Afterwards, the trainer provides participants with a brief overview of their technical health program.

OBJECTIVES

- To become better acquainted with one another and begin to form a group.
(Steps 1-5)
- To share perceptions about primary health care and future roles as community health workers and educators.
(Steps 3, 4)
- To describe the basic framework of the PCVs' health program.
(Step 4)

RESOURCES

Trainer Attachment:
- 1A Suggested Symbols for Sharing Perceptions Exercise

MATERIALS Markers and newsprint with symbols drawn.

PROCEDURE

Trainer Note

Before this opening session, draw four symbols similar to those in Trainer Attachment 1A on four different sheets of newsprint. Avoid extraneous and possibly interfering or confusing details. The examples should be as simple as possible. Post the symbols on the four walls of the meeting room and, if practical, have chairs near each one. Cover the symbols with a blank sheet of paper or fold them up from bottom to top and secure with tape until Step 2.

In Steps 2 and 3, participants will use the four drawings to describe and share some of their feelings about being involved in the training course. They will also use the same symbols to discuss their perceptions about primary health care. This kind of activity works best when the trainer keeps the drawings simple, asks clear questions, and allows the participants as much room as possible for interpretation and expression.

Step 1
(30 min)

Getting Acquainted With One Another

Explain to participants that perhaps the most significant element in beginning a training program is to get to know the other people with whom they will be working. Ask them to participate in an ice-breaking activity that will help everyone learn names and faces and find out new things about fellow group members and trainers.

Trainer Note

Any one of various ice-breaking games can be employed in this step. Several examples are given here.

Alliteration Name Game: Trainer begins by giving his or her name followed by an adjective which describes how he or she is feeling at the moment and which begins with the first letter of the name (e.g., "Mike Motivated" or "Nancy Nervous"). Moving clockwise around the room, each participant then takes a turn at repeating all the preceding names and descriptors and adds his or her name to the end of the growing list. The game ends when all participants have added their names and have tried to repeat the list.

Continued

Superlatives: Participants silently study the composition of the group and select a superlative adjective that describes themselves in reference to the others (e.g., shortest, most nervous, oldest). Moving around the room, they tell their adjectives, give an explanation, and check the accuracy of their self-perceptions.

Who Am I: Trainer gives participants paper, markers and string, and asks them to answer the question "Who Am I" by drawing a pie with wedges that illustrate major areas of their lives. Participants then hang their sheet around their necks and move around the room meeting people, but without speaking. Afterwards, the trainer asks particpants to find two or three other people with particularly interesting "pies" and ask them questions about the graphic information.

Fire of Your Life: Trainer provides a box of wooden matches. Participants sit in a cirlce and have the time it takes for a match to burn to say what they want about themselves. This is particularly effective with large groups.

Step 2
(20 min)

Sharing Feelings Through Symbols

After conducting one of the initial games, ask four people to uncover the symbols that have been posted around the room. As participants are looking at the symbols, write the following question on the board:

- Which symbol characterizes how you feel right now?

Ask participants to move around the room, examine the symbols and choose one, then move to that area and introduce themselves to others gathered there, sharing each of their reasons for choosing that particular symbol.

After people have had a chance to talk for 10-15 minutes, ask a volunteer from each group to share some of the themes that came out in their discussions.

Trainer Note

Other questions can be substituted as the training situation may dictate. (E.g., which symbol best represents the reason(s) you are here involved in this program?)

Step 3
(25 min)

Exploring Perceptions of Health Education

Repeat the process using the following question:

- Which symbol best represents what primary health care means to you?

Again, have participants form clusters and discuss their perceptions of primary health care. As the small groups summarize their perceptions for the others, point out similar themes and ideas which emerge and help the group draw some general conclusions about their future roles as health workers and educators.

Trainer Note

As in Step 2, you may want to substitue "primary health care" with health education", "nutrition", or another title that is more closely associated with the Volunteers' particular program.

Step 4
(20 min)

Overview of the Health Program

When the groups have finished reporting, bring everyone together. Building on what just came out of the discussion of primary health care, give the group a short overview of their future job assignment. Also, briefly introduce participants to the concept of primary health care as defined in the training course.

Trainer Note

While it is important to give participants some notion of their technical program and approaches to primary health care, try not to overload them here with details. The overview is intended to provide only a general context. Anything more at this point might induce anxiety in participants.

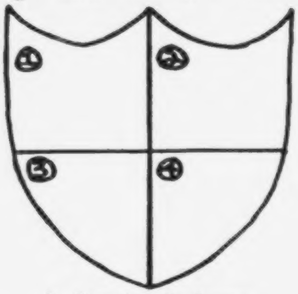
Step 5
(15 Min)

Close the session by asking participants to refer once again to the four symbols. Tell them to stay seated this time and select the symbol(s) that represents their personal expectations for the upcoming training. Ask three or four participants to share their selection and explain their expectation.

Tell the group that they will have an opportunity to discuss specific expectations and needs more fully during Session 2.

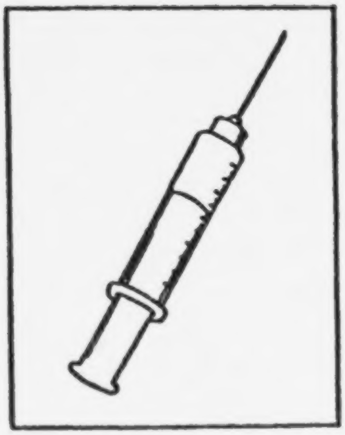
Trainer Note

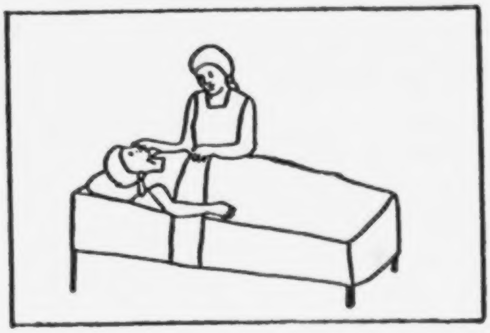
If your training group is small, the activity in Steps 2 and 3 will not work as described. One alternative is to reduce the number of symbols from four to three. Another alternative (especially effective with groups of five to ten) is a "Coat-of-Arms" exercise. In this activity, the trainer gives each participant a sheet of paper with a blank "Coat-of-Arms" drawn on it. Participants answer the questions posed by the trainer in Steps 2 and 3 by drawing symbols in each section of the shield. Up to four questions may be asked to elicit more information and perceptions. After the "Coat-of-Arms" are complete, participants take turns explaining theirs to the others. As in the other activity, the trainer helps the group draw some conclusions regarding their perceptions of training and future work as health workers and educators.

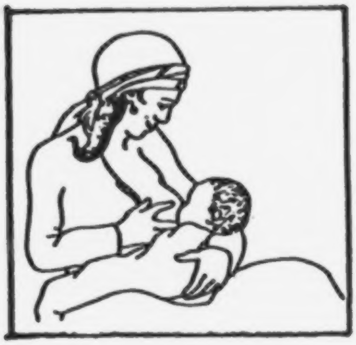


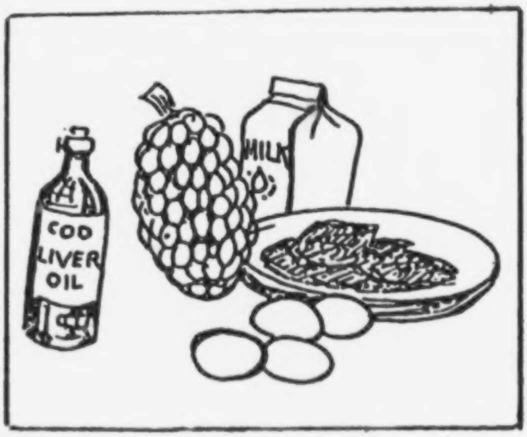
A Coat-of-Arms

SUGGESTED SYMBOLS FOR SHARING PERCEPTION EXERCISE








COD
LIVER
OIL
MILK

Session 2

GENERAL ASSESSMENT

TOTAL TIME 2 hours

OVERVIEW In the first session participants are given a brief overview of their technical health program and Primary Health Care. During this session the group completes a pre-test that helps them assess their knowledge on certain primary health care activities. Then they work through their answers by pooling their information in a large group discussion. Through this process participants and trainers can more accurately define their training needs and adapt their training schedule accordingly during the next session (Session 3, Defining Training Course Objectives).

OBJECTIVES

- To assess entry-level knowledge of Primary Health Care and its related program activities. (Step 1)
- To identify areas of skill, knowledge and interest among the participants. (Step 2)

RESOURCES Handouts:

- 2A Pre-Test (To be adapted by trainer)
- 2B Pre-Test Answer Sheet

MATERIALS Newsprint, markers, pencils

Trainer Note

As stated in the Trainer's Guide, this course is comprised of 7 modules. Preceding each module are the behavioral objectives for that module. Learning objectives are given in each session. These objectives should be used when developing an instrument or pre-test, to assess the knowledge of the participants. An example of a pre-test is given in Handout 2A. Please note that the pretest should be followed by a post-test (using the same questions) administered at the end of the training program.

The pre-test is intended to enable individuals to assess their knowledge and some cognitive skills in the areas of Primary Health Care. As such, it should be administered in a non-threatening manner. Encourage the participants to view it as a means for clarifying their strengths and weaknesses in this area.

Assessing participants' skills, while more time consuming, is equally important. As stated in the Trainer's Guide, the very nature of these experiential sessions provides the opportunity to assess skills. That is, each time you move through the experiential learning cycle, the application step will provide the opportunity for you and the participants to assess their ability to apply their knowledge (i.e. skills development).

PROCEDURE

Step 1
(80 min)

Knowledge Assessment

Introduce and distribute Handout 2A (the pretest). Explain that it is the basis for the scope of work and information contained in the training and that it can be used throughout the training as a worksheet.

Ask participants to answer the pre-test.

Step 2
(30 min)

Information Pooling

Using the pre-test as an outline hold a short discussion on the following points:

- How they arrived at their individual answers for the test (for example: personal experiences, prior education, guesses, etc.)

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- What local/community-based experiences they have had with some of the primary health care activities addressed in this pre-test.

- How their experiences, skills and knowledge in this area compare with each other.

Ask a participant to volunteer to serve as a recorder. Ask the recorder to jot down comments, questions, impression and experience on newsprint.

Distribute Handout 2B (the Pre-Test Answer Sheet) and allow the group 5-10 minutes to review the answers. Next have the group discuss any major concerns or findings they observed in this brief review of their answers. Close this session by having the group draw conclusions about the diversity or similarities of their understanding about this subject.

Trainer Note

At the end of this session collect the participants pre-tests and explain to them that you will use it to gauge their knowledge and to identify areas in the training that will need more emphasis.

Name________________________________

Pre-Test

I. Primary Health Care.

1) Define Primary Health Care. (Session 5)

2) List the eight components of Primary Health Care. (Session 5)

3) Describe and/or diagram the organizational structure of the host country's health care delivery systems. (Session 6)

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4) Describe the host country's intersectoral/multinational approach to Primary Health Care. (Sessions 6, 7)

5) List 3 local health beliefs, practices and socio-economic conditions which affect local individual, family and community health. (Session 8)

Traditional Health

Family Health

Community Health

6) Define monitoring and describe the tasks involved in monitoring. (Session 9)

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II. Community Analysis and Organization

1) List 8 major areas of information that need to be collected to learn about the community. (Session 10)

2) Name three techniques that can be used to gather information. (Sessions 10, 14)

3) State three techniques used to motivate communities to participate in programs. (Session 14)

4) Give five functions of a Health Committee. (Session 15)

5) Describe four types of working styles and the reasons for using any or a combination of styles. (Session 16)

III. Health Education

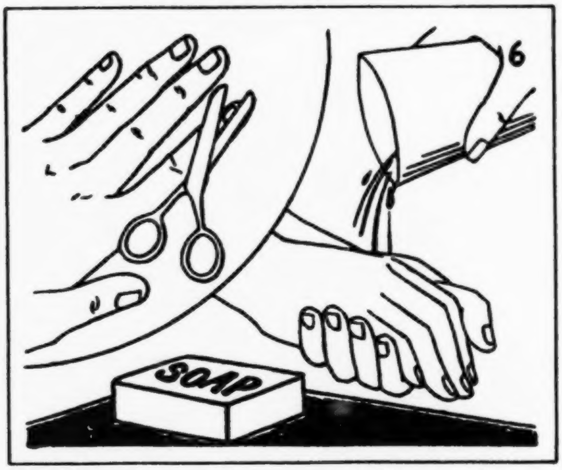
1) List at least four things you would do to decide what topics are most appropriate for health education activities in the community. (Sessions 19, 21, 25)

2) What three criteria do you use to evaluate health education objectives? (Session 20)

3) List at least five items to include in a health education project plan. (Session 21)

4) List at least five nonformal education techniques that you can use in health education. (Session 22)

5) Look at the picture below. Will it be effective in communicating good personal hygiene techniques to rural villagers in the host country? yes___ no___



List 3 kinds of criteria that you used to assess the picture.
(Session 23)

6) Is Pretesting of Pictures worth the time and cost? yes___ no___
Explain your answer.
(Session 24)

7) List the four steps of the experiential learning cycle and give an example illustrating what you would do for each step.
(Session 25)

IV. Nutritio-

1) Categorize foods into 3 groups and give one example of a local food for each group. (Session 28)

Food Categories

1.__________________ 2.__________________ 3.__________________

Local Food
1
2
3

2) List 3 factors which contribute to nutritionally at-risk infants. (Session 29)

3) Describe 3 different anthropometric measures that are used to assess children's nutritional status. (Session 29)

4) State three reasons for using the Road to Health chart. (Session 29)

5) Describe the nutritional needs of infants at 4, 6, 9 and 12 months. (Session 30)

6) Define causal chain and causal web and list three factors for each that are related to malnutrition. (Session 31)

V. Maternal and Child Health

1) Describe three signs of pregnancy. (Session 32)

2) State three things a woman should do during pregnancy. (Session 32)

3) Give three examples of danger signs during pregnancy. (Session 33)

4) List the age range and indicators for three stages of normal growth and development of children up to two years of age. (Session 34)

5) Explain the use, side effects and effectiveness of three methods of contraception. (Session 35)

VI. Diseases in the Developing World

A. Immunizable Diseases

1. Describe the major clinical signs and symptoms for measles. (Session 37)

2. Describe how neonatal tetanus is transmitted. (Session 38)

3) At what ages should you give a child each of these vaccines? (Sessions 36, 37, 38)

DPT:

TT:

OPV:

Measles:

BCG:

Yellow Fever:

B. Diarrheal Disease

1. Name 3 signs of severe dehydration. (Session 39)

2. List 3 things to do when a child has some dehydration. (Session 40)

3. List 3 local foods that are good to give children when they are having diarrhea. (Session 40)

4. List the ingredients in ORS packets. (Session 40)

5. Explain why simple rehydration (fluid replacement) is not enough for the treatment of diarrhea and prevention of dehydration. (Session 40)

C. Other Endemic Diseases

1. Identify the 2 highest risk groups for malaria. (Session 41)

2. List 3 signs and symptoms of malaria. (Session 41)

3. Explain the difference between presumptive treatment of malaria and prophylactic treatment. (Session 41)

4. Name three water-borne diseases that are endemic to the host country and describe one measure for controlling each of these diseases. (Session 41)

5. Describe how three of the above stated diseases are transmitted. (Session 41)

6. Explain how good sanitation and hygiene practices can prevent the spread of disease. (Session 42)

Pre-Test Answer Sheet

I. Primary Health Care

1. - "PHC is a practical approach to making essential Health Care universally accessible to individuals and families in the community in an acceptable and affordable way and with their full participation."

2. - Education concerning prevailing health problems and the methods of preventing and controlling them,

   - Promoting food supply and proper nutrition,

   - An adequate supply of safe water and basic conditions,

   - Maternal and child care, including family planning,

   - Immunization against the major infectious diseases.

   - Prevention and control of locally endemic diseases.

   - Appropriate treatment for common diseases and injuries.

   - Provision of essential drugs.

3. - This will vary with the country.

4. - This will vary with the country.

5. - This will vary with the country.

6. - Monitoring means to closely observe or check on a rountine basis.

   The tasks involved in monitoring consists of:
   - determining what to monitor
   - determining how and when to monitor
   - developing checklists for monitoring and
   - after monitoring, providing feedback.

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II. Community Analysis and Organization

1. 1) Kinship
   2) Education
   3) Economics
   4) Politics
   5) Religion
   6) Recreation
   7) Association
   8) Health

2. Observation
   Listening
   Interviewing

3. 1) Teaching techniques that actively involve community members
   2) Starting with a project that will produce results quickly before going on to more long-term efforts.
   3) Building on local self-help traditions, beliefs, customs and religious values.

4. 1) Identifying and analyzing community health problems and formulating plans to solve them.
   2) Mobilizing community resources
   3) Generating community support for and active involvement in activities aimed at health improvement.
   4) Forging collaboration with the national health services and development agencies to secure needed resources.
   5) Supporting or supervising the community health worker.

5. The four working styles described in Session 16 are:
   Direct Service
   Demonstration
   Organizing with Others
   Indirect Service

   These four styles can be seen as related to stages in the development of self-reliance. In reality, different styles or combinations of styles may be called for at different times, depending on the circumstances, the urgency of the task, whether one is addressing a long or short term situation, etc.

III. Health Education

1. To determine what topics are most appropriate for health education activities in the communities:

   - Ask people in the community about health problems
   - Prioritize the problems
   - Identify the kinds of local practices that are helpful and harmful in relation to the problem
   - Decide which practices have highest priority for change or encouragement

2. Items to include in a health education project plan:

   - The objectives (outcomes you expect)
   - The target group
   - Techniques and visual aids to use
   - Location and duration of the project
   - Resources needed (expertise, supplies, equipment, etc.)
   - When and how to evaluate the project

3. Some examples of nonformal education techniques to use in health education are :

   Role Play a situation
   Large group discussion
   Small group problem solving
   Drama
   Songs
   Simulation
   Story telling
   Demonstrations with skills practice
   Brainstorming
   Field trips
   Drawing and discussing pictures

4. Criteria for evaluation of pictures are:
   - Does it help accomplish the objectives?
   - Is it appropriate for the local culture?
   - Is it well designed? (Is it easy to see, simple, well organized, focused)

5. Yes.
Pretesting pictures can save time and money by identifying whether they get and hold interest and whether they communicate the intended message.
Pretesting also provides a way to learn more about the community.

6. The steps of the experiential learning cycle are:

   Experiencing (doing something)
   Processing (discussing reactions and observations)
   Generalizing (deciding what that experience tells you about the real world)
   Applying (planning more effective behavior).

   The example should be comparable with the one given in Handout 25A, Session 25.

IV. Nutrition

1. Answers will depend on what three categories are chosen and what food stuffs are available in your country. The following is an answer based on Trainer Attachment 28A.

	Food Categories		
Local Foods	Body Building Foods	Energy Foods	Protective Foods
1. Fresh Fish	x		
2. Millet		x	x
3. Mango			x
4. Palm Oil		x	

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?. 1) Maternal weight below 43.5 kg.
   2) Failure to gain 0.5 kg. a month in the first three months of life
   3) An episode of measles, whooping cough and severe repeated diarrhea in the early months of life.

3. arm circumference
   weight for age
   weight for height

4. 1) Keeping pertinent and concise medical records on children during critical development stages.

   2) Encouraging mothers ongoing involvement with an Under-Fives clinic.

   3) Provide quick visual menas of monitoring a child's developmental status.

5. Weaning foods should be introduced to a child between 4 and 6 months of age. In addition to breast milk a child at 4 months of age should be given once a day a bland well-mashed porridge comprised of fruits, vegetables and the local staple grain or tuber. At 6 months of age, in addition to breast milk a multimix food, composed of a carbohydrate food, a protein supplement, a vitamin and mineral supplement and a calorie supplement should be served 2 to 4 times a day. At 9 months of age a child can manage easily chewable foods. The child in addition to breast milk should be given the multimix foods about 3 times daily, each dish providing about 220 calories. Between 9 and 12 months a child should be given between 1 to 1 1/2 cups of multimix food four to six times a day.

6. Causal chain can be defined as a micro way of viewing a health problem. It can be considered the chain of events leading to disease or ill health. Some of these factors leading to malnutrition are:

   - Low birth weight
   - Bottle feeding
   - Abrupt weaning

   Causal web can be defined as all the underlying factors contributing to and enhancing the disease. Examples are:

   - Inequitable food distribution
   - Insufficient food production
   - Poverty

V. Maternal and Child Health

1. Signs of Pregnancy Include:

    1) Ceasation of monthly periods
    2) Morning sickness
    3) Enlarged and/or tender breasts
    4) Weight gain and increasing size of abdomen
    5) darkened nipples

2. A pregnant woman should:

    1) eat well
    2) get plenty of rest
    3) take malaria pills and/or receive 2 doses of tetanus toxoid or a booster dose.

3. Signs which indicate high risk pregnancy include:

    anemia
    sickle cell disease
    malaria

4. Between birth and three months a child can hold his head up. Between 4-6 months a child smiles, acts sociable, can roll over. By one year he may walk, say mama or dada.

5. See Handout 35B (Session 35) for a complete listing of contraceptives, their use, side effects and effectiveness.

VI. Diseases in the Developing World

A. Immunizable Diseases

1. High fever before rash
   Cough
   Runny nose
   Redness of eyes
   Raised rash

2. Usually by an unsterile instrument used to cut the cord or "packing" the umbilicus with contaminated substances.

3. The WHO recommended schedule for vaccinations is as follows:

   DPT - 2, 3, 4 months of age
   TT: 2 doses separated by 4 weeks as early in pregnancy as practical and/or a booster dose for those preganant women who have completed the series but have not been vaccinated within the past 3 years.
   OPV - 2, 3, 4 months of age
   Measles - 9 months of age
   BCG - at birth
   Yellow Fever - After 1 year of age followed by a booster every ten years.

B. Diarrheal Disease

1. (1) no tears, (2) very fast or weak pulse, (3) no urine for 6 hours.

2. (1) give ORS packets, (2) continue breastfeeding, (3) give some light high calorie food.

3. These will vary with the country, but in general may be foods such as soft rice, bananas, mashed carrots, multimixes, soups, teas, etc.

4. sodium chloride, sodium bicarbonate or trisodium citrate, potassium chloride and glucose.

5. Simple fluid replacement is not enough for the prevention of dehydration because more is lost than just fluid in diarrhea episodes; important salts are lost and an electrolyte imbalance often occurs. Fluid replacement doesn't treat diarrhea as diarrhea is usually a self-limiting disease.

C. Other Endemic Diseases

1. Young children
   Pregnant women

2. shaking chills
   high fever
   headache

3. Presumptive Treatment means to treat before the disease is confirmed by a laboratory test.

   Prophylactic Treatment means preventing infection or illness by taking anti-malarial drugs on a regularly scheduled basis.

4. This will vary with the country.

5. This will vary depending on the diseases endemic to the host country.

6. Good hygiene and sanitation can prevent the spread of disease by breaking the transmission cycle of the disease. This can be done by covering latrines and garbage bins to prevent flies from transporting contaminated feces and spoiled foods to people. Washing hands with soap after defecating and always before eating or cooking should always be done.

Session 3

DEFINING THE TRAINING COURSE OBJECTIVES

TOTAL TIME	2 hours
OVERVIEW	Up to this point participants were given an overview of their training program and they have examined their own skills and knowledge that they bring to this program. In this session they review the training objectives, comparing them with individual TAC sheets, descriptions of work they have received, expectations of host country agencies, their pre-test and their self-assessment worksheets. Through this process, participants and the trainer exchange their expectations about the training, recognize the flexibility in the training design, identify opportunities for peer teaching and begin to consider their role as health workers in the context of Primary Health Care.

OBJECTIVES

- To identify individual expectations about the training.
(Step 2)

- To examine the training objectives and schedule and make modifications as appropriate.
(Steps 3, 4)

RESOURCES

Handouts:
- 3A Self-Assessment Worksheet
- 3B Peace Corps TAC Sheet (to be provided by trainer)

Trainer Attachments:
- 3A Introduction to Behavioral Objectives
- 3B Training Calendar (to be prepared by trainer or Peace Corps staff)

Trainer Note

As this session focuses on the participants and trainer jointly reviewing the training course objectives and agenda, it is imperative that you, the trainer, read the sessions in advance in order to provide the necessary background detail that will be needed when modifying the course schedule to meet the participants' identified needs.

PROCEDURE

Step 1
(15 min)

Self-Assessment

Distribute Handout 3A (Self-Assessment Worksheet). Allow participants time to complete this form and ask them to hand in the worksheet.

Trainer Note

Although the participants may not have a clear idea of exactly what they want or need to know at this point in the training, the opportunity to write down their ideas after taking a pre-test will force them to reflect on their needs and expectations. The worksheet along with their pre-test answer sheet provides a reference for evaluation at the end of the training.

The self-assessment worksheet should be collected and used by the trainer along with the pre-test to gauge the level of knowledge of the group and individuals. You can refer to this information throughout the training to mix knowledge and skill level in small groups.

Step 2
(45 min)

Sharing Expectations and Doubt

Ask for a person to act as a recorder. Have each participant share one example of the skills, knowledge, or experience they want to gain by the end of their training. Based on this list have the participants form three small groups that combine, in as much as possible, one person with a certain skill (cognitive, technical) with one person who lists this as a desirable outcome of their training.

Distribute Handout 3C (TAC sheet) and ask the small groups to spend about 15 minutes reviewing these sheets and, in light of this and previous information, have them share and discuss the hopes and doubts they have for this program. Have them focus their discussion on answering the following questions:

- Why did you come to this training?
- Does the TAC sheet information concur with your expectations?
- What do you hope to accomplish?
- What is the best thing that could happen? the worst?
- What is some barrier or obstacle that might prevent you from fulfilling your expectation?
- How can this obstacle be overcome?

Tell them that after they have shared their thoughts, to draw a picture that represents the hopes/expectations and doubts of the group.

Finally, reconvene the group and ask them to share their drawings and have the recorder list the hopes and doubts expressed in these drawings in two columns on newsprint.

Trainer Note

The list of expectations/hopes and doubts may be used to periodically evaluate how well the training program is:

- living up to expectations
- meeting needs
- providing the kind of education that participants find most useful.

At the end of training, both the drawings and the lists may be used as reference material to evaluate the entire PST and to make recommendations for the future. Point out that the participants' concerns and learning needs will be examined in more detail during the next step.

Step 3
(20 min)

Sharing Program Objectives

Distribute the Behavioral Objectives (Trainer Attachment 3A) and have the group compare their lists of hopes and doubts with these objectives. For each concern listed, ask if it is significant for the group members. Write the number of people who responded "Yes".

Ask the participants to select two or three of the concerns listed that they consider to be most important. Write the appropriate number after each item.

Add the numbers in the "Significant for You" column and the "Top Problem" column and put the total in "Importance" column.

Go through the list of top problems and ask participants to respond to the question, "Do you think this training program can help you solve this problem?" Check the ones which training addresses.

Trainer Note

This activity is similar to the community needs assessment on pages 3-14 of Helping Health Workers Learn. It is valuable for the group to look at their own problems and needs, and their priorities. Remember that in asking which concerns may be addressed by training, it is understood that there are limits to what training can achieve. There are two kinds of limits. One kind of limit says, "this course cannot be helpful in solving a certain problem." The other kind says, "time constraints keep this course from addressing every problem that it may be helpful in solving." This exercise helps the group to concentrate on the solvable, while at the same time limiting themselves to an approachable number of things to deal with. Participants should look at the exercise as being one of choosing items from the overall course "menu" which has already been established. Remember to refer to the list of "hopes" and "doubts" from Step 2 during this activity. An illustration of a sample chart follows.

Continued

A. Concern	B. Significant For You?	C. One of Top Problem	D. Importance	E. Addressed in this Program
Understanding Community Health Work	(number of people who say "Yes".)	number of people who list this in their top 2 or 3.	Add both B and C.	Check the ones from column C.
Working with Ministry				
Having Sufficient technical knowledge in recognition and control of - Immunizable Diseases - Malaria - Diarrheal Disease, - Nutritional Needs				
Having sufficient skills to train and motivate people to assess their health practices and adopt helpful ones.				

Step 4
(30 min)

Review

Compare the groups' concerns and priorities with the program objectives to find out if people are in agreement or modifications need to be made in view of expectations, needs or interests. Distribute and or display on newsprint Trainer Attachment 3B (the training schedule you adopted prior to the session). Hold a group discussion and answer any questions they may have as to how this training schedule may or may not meet their needs/expectations. Close this session by discussing any housekeeping rules that need to be addressed. Examples of some rules to be made or discussed are:

- Session Times
- Promptness
- Maintenance of rooms and materials
- Sharing teaching responsibilities

Trainer Note

While the behavioral objectives describe what is expected that the participants will be able to do at the end of the training course, it does not list the tasks that they will undertake to accomplish their goals/objectives. These tasks may be some of the items that the participants list as a concern or expectation and for which they suggest that the program schedule be modified. Therefore, some clarification and/or discussion by you of detailed content and skill areas covered in the training program may be needed prior to finalizing and/or restructuring their training.

Self-Assessment Worksheet

Please complete the following sheet for your own reference and some group sharing.

(A) Two skills or concepts on Primary Health Care activities that you bring to this training.

____
____
____

(B) Three most important skills (cognitive, practical, communicative) that you want to gain by the end of this training.

____
____
____

(C) Two ways in which you envision your role as a Volunteer contributing to the achievement of the goal of "Health for all by the Year 2000".

____
____
____

(D) One overall or specific personal goal you plan to achieve by the close of the training.

____
____
____

Introduction to Behavioral Objectives

In order to develop a common understanding of the purposes of the training and thereby improve communication between you and the participants a list of behavioral objectives has been compiled and is found in front of each training module.

These objectives are based on the proposed three week training course and should be adapted to reflect your own training schedule. Give participants a copy of the objectives to keep throughout the program. This way, they will know exactly what the desired outcome of the training is and can identify those objectives which reflect particularly important needs and expectations they may have.

Session 4

TRAINING PROGRAM EVALUATION

TOTAL TIME 1-2 hours

OVERVIEW

A constructive evaluation is an important part of any well-designed training program. During this session, participants and trainers will determine how well the training achieved its stated objectives and how the program might be modified to serve the needs of health workers more appropriately in the future. The group will complete an evaluation instrument as well as verbally discuss problems and potential improvements. If the program is longer than two weeks, a mid-point evaluation (using the same instrument) should be conducted as well as the final evaluation.

OBJECTIVES

- To evaluate in writing and in discussion the effectiveness of the training program. (Steps 1, 3, 4)
- To check individual as well as group goal accomplishments during the training. (Step 2)
- To identify specific ways to improve the training design and program implementation. (Steps 3,4)

RESOURCES

Behavioral objectives from each module completed during the course.

Handouts:
- 4A Training Program Evaluation
- 3A Self-Assessment Worksheet (from Session 3)

Trainer Attachment:
- 4A Trainee Session Assessment Sheet

MATERIALS Newsprint, markers

PROCEDURE

Trainer Note

Trainer Attachment 4A contains forms for periodic use throughout the course. They serve to assess both this manual and the training course as planned and implemented in the field. Handout 4A (Training Evaluation) is a final evaluation instrument to be used as described in this session.

Step 1 (20-30 min) **Written Evaluation of the Program**

Review the session objectives and distribute copies of the Handout 4A, (evaluation form) to all participants. Ask them to take 15 minutes to fill out the form and explain that they will discuss the program afterwards.

Trainer Note

Ask participants to take out and refer to their copies of the Behavioral Objectives from each of the modules and the Self-Assessment Worksheet. These handouts were used in Session 3 to establish the base of the program and should now help participants gauge their learning and skill development. If alternate worksheets or forms were used during the initial objective-setting exercise, then tie them in here with these steps. If participants also did daily or weekly evaluations of the course, ask them to refer back to those also.

Step 2 (15 min) **Individual Accomplishments**

Have participants read back over their Self-Assessment Worksheets from Session 3. In turn, ask each person to briefly comment on their personal accomplishments during the program.

Trainer Note

The idea in this step is to give each participant an opportunity to share accomplishments in the context of his or her particular job and community.

Step 3
(15 min)

Identifying Problems in the Training

Have participants form small groups of four and list on newsprint two to three aspects of the program which have been problematic and possible suggestions for improvement. Encourage participants to be as specific as possible. As the groups finish the task, have them post the newsprint on the wall.

Step 4
(15 min)

Summary and Conclusions

Reconvene the group and review the newsprint suggestions with them. Ask someone to summarize the observations and suggestions for improvement which have resulted from the discussions. Have a participant record these on newsprint for use by the staff later. Circle those observations that seem to be generally agreed upon and most feasible for future implementation.

Close the session by asking the group to comment on the written evaluation instrument and ask them to suggest other ways that program evaluations can be handled.

Trainers Note

If more time is available for evaluation purposes the following sequence is offered as an alternative to the above Step 4.

While the small groups are working in Step 3, arrange the chairs in the room for a fish bowl type of discussion. Place three chairs in the middle of the room facing each other. Place all other chairs in a circle around the three inner chairs. Be sure the newsprint is posted where everyone can see it.

Alternate
Step 4
(45 min)

Fish Bowl Discussion

Have the group reconvene and occupy the chairs in the outer circle. Explain the "fish bowl" activity. (Ask if anyone has had experience with this activity. If so, have them help with the explanation). The explanation should include the following points:

- Only three people at a time will be in the inner circle.

- The role of each of the three people will be to discuss and respond to the posted observations and viability of the suggestions.

- When someone from the outer circle wants to enter the discussion, a person from the discussion group should leave and join the observers.

Explain that the reason for using the fish bowl structure is to provide a structure for discussion and to encourage constructive feedback and suggestions.

Before beginning the discussion, have one of the participants scan the lists and point out common themes or parallels among the observations. Ask that three volunteers move to the inner circle. Initiate the activity by responding to one of the posted problems.

Trainer Note

One of the participants may be asked to facilitate this part of the session. If so, brief that person on how to handle the exercise either before the session or during the small group work in Step 3.

It is important that people feel free to express their thoughts without fear of reprisal. People should be encouraged to enter the discussion and to exchange places with one another when they have something to say. It is a good idea to have at least one member of the training staff in the discussion group at all times.

After all major issues have been discussed, return to the original Step 4 (Summary and Conclusions), and modify it so participants have the chance to comment on the appropriateness of a "fish bowl" discussion for evaluation purposes.

Session 4, Handout 4A
Page 1 of 2

Training Evaluation

We need your candid feedback on the training program so that we can make improvements in the design and provide the next group of participants with a richer experience. Please keep in mind the original Training Objectives as you answer the following questions:

1. The objectives of the training program seemed:

+-------------+------------+-------------+-------------+

1	2	3	4	5
Mostly irrevelant to my PC work		Somewhat Relevant		Very Relevant

Because ____
____

2. During the training course we accomplished the objectives:

+-------------+------------+-------------+-------------+

1	2	3	4	5
Not at all		Somewhat		Entirely

Because ____
____

3. The trainers were:

+-------------+------------+-------------+-------------+

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because ____
____

4. For my learning, the activities used during the sessions were:

+-------------+------------+-------------+-------------+

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because ____
____

5. The handouts, visual aids, and other support materials used in the sessions were:

```
+-------------+------------+-------------+-------------+
1             2            3             4             5
Nearly                     Somewhat                    Very Useful
Useless                    Useful
```

Because ____
____

6. The specific sessions or activities I found most helpful to me in my work were:
____
____
____

7. The specific sessions or activities I found least helpful to me in my work were:
____
____
____

8. These sessions could be improved in the future by:
(What could have made these session more worthwhile for you in relation to the job you have in your workplace and/or community?)
____
____
____

9. The most meaningful things that I learned during this program were:
____
____
____
____
____

10. Some other comments I would like to give to the training staff are:
____
____
____
____
____

(Adapted from: A Trainer's Resource Guide, Draft Peace Corps)

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Session 4, Trainer Attachment 4A

TRAINEE SESSION ASSESSMENT SHEET

Session______________________________ Date:______________________

Please fill in the ratings and provide short answers to the questions below. Give specific examples whenever possible.

1. The training objectives for this session seemed:

1	2	3	4	5
Mostly irrelevant to my PC work		Somewhat Relevant		Very Relevant to my PC work

Because____

____

2. In this session we accomplished the training objectives:

1	2	3	4	5
Not at all		Somewhat		Entirely

Because____

____

3. For my learning, the activities used during the training were:

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because____

____

4. The handouts were:

1	2	3	4	5
Nearly Useless		Somewhat Useful		Very Useful

Because____

____

5. The most important thing I learned in this session was:

____

____

6. This session could be improved in the future by:

____

____

Module 2

Primary Health Care

Behavioral Objectives

By the end of this module the participants will be able to:

1. Discuss the Host Country National goals and objectives for Primary Health Care as stated in the country's health plan or policy, in terms of how it incorporates all or some of the eight components of Primary Health Care.

2. Explain how the Volunteer's role can contribute to the implementation and achievement of at least one aspect of the Host Country's Primary Health Care plan.

3. Discuss the effect of specific cultural beliefs/practices on the health of women and children.

4. Define monitoring and list several indicators which will help volunteers document change or identify problems for solutions in the context of their health projects.

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Session 5

PRIMARY HEALTH CARE

TOTAL TIME 2 hours

OVERVIEW A thorough understanding of Primary Health Care is important for all health and development workers. In this session participants critically review the WHO/UNICEF concept of primary health care as originally defined at the World Health Conference at Alma Ata, Russia in 1978. They focus on the emphasis of an integrated/multisectoral approach and community involvement. In small groups they develop charts illustrating primary health care which show the place of health education and their assigned programs. Through readings they learn about and discuss different approaches to primary health care.

OBJECTIVES

- To explain why primary health care is an appropriate means of protecting and promoting the health of all the people of the world.
  (Step 1)
- To describe the eight components of primary health care and give examples of primary health care activities.
  (Steps 2 - 3)
- To describe the integrated/multisectoral design of health and development that characterizes primary health care.
  (Steps 1, 3, 4)
- To identify at least two approaches to implementing primary health care system.
  (Steps 3-5)

RESOURCES

Handouts:
- 5A Health: A Time For Justice (ICE)
- 5B Water Supply and Health in Developing Countries: Selective Primary Health Care Revisited.
- 5C Selective Primary Health Care

MATERIALS

Projector and screen if movie is shown, newsprint, markers, the Film, "That Our Children Will Not Die" (Ford Foundation).

PROCEDURE

Trainer Note

Before this session you should critically read all the handouts so that you are prepared to facilitate discussions on the provocative concept of PHC. Viewing and discussing the film "That Our Children Will Not Die" is a suggested alternative to reading and discussing the articles. You may consider lengthening this session so that the readings and film can both be included.

Step 1
(15 min)

Understanding The Primary Health Care Approach

Introduce this step by reading and writing the following definition of Primary Health Care as stated at the International Conference on PHC in Alma Ata in 1978.

"Primary Health Care is a practical approach to making essential health care universally accessible to individuals and facilities in the community in an acceptable and affordable way and with their full participation."

"Health cannot be attained by the health sector alone. In developing countries in particular, economic development, anti-poverty measures, food protection, water, sanitation, housing, environmental protection, and education all contribute to health and have the same goal of human development."

Ask participants to look at this definition carefully and then using their knowledge of health care in the U.S. discuss aspects of the Alma Ata definition of PHC, and why some countries may find it a difficult or revolutionary concept to implement.

Trainer Note

Possible questions to facilitate this discussion might include:

- What is meant by essential health care?
- What aspects of health care have been essential to you?
- Is health care universally accessible in the U.S.?
- Are there more physicians and other health personnel and facilities in urban areas as compared to rural areas?
- What is meant by secondary and tertiary health care? How do these levels of care relate to Primary Health Care?
- Do you think that the health care system in the U.S. is acceptable to everyone? If not, why not?
- Do most Americans fully participate in the decisions that affect the kind of health care that is delivered in their area? If not, why not?
- What about the cost of health care? Is it affordable?
- What do you think about viewing health as an integrated part of the political, economic, social and environmental aspects of a country?

Step 2
(15 min)

Defining the Eight Components of Primary Health Care

Present the list of the eight components that the delegates from 134 governments and representatives from 67 United Nations' organizations and other specialized agencies have determined to be essential services provided by primary health care and ask the participants to briefly discuss why they think these areas have been stressed.

Trainer Note

Write the following list of the eight components of Primary Health Care on newsprint and present to the Volunteers:

- Education concerning prevailing health problems and the methods of preventing and controlling them.
- Promotion of food supply and proper nutrition.
- Adequate supply of safe water, and basic sanitation.
- Maternal and child care, including family planning.
- Immunization against the major infectious diseases.
- Prevention and control of locally endemic diseases.
- Provision of essential drugs.
- Appropriate treatment of common diseases and injuries.

This discussion should focus on:

- How these eight areas can help persons to lead a socially and economically productive life.
- The interrelationship between these areas.
- How an integrated approach to health care can most effectively deliver these services.

Conclude this discussion by stating that although most persons agree that primary health care should include these eight essential components, the ways of approaching the implementation of the PHC programs vary from one country and community to another and the following articles they will read and discuss present some of the different approaches/strategies.

Step 3 (20 min) **Examining Different Approaches to Primary Health Care**

Have the participants form three groups and assign one of the articles found in Handouts 5A (Health: A Time for Justice), 5B (Water Supply and Health in Developing Countries: Selective Primary Health Care Revisited), and 5C (Selective Primary Health Care) for reading by each group.

Trainer Note

Ask the participants to keep the basic principals of Primary Health Care in mind when they read these articles and to select one person in each group to prepare a 3-5 minute summary of the article that they have read to present to the large group reconvened for discussion in the next step (Step 4).

The attached articles were selected because they present two opposing approaches/strategies for the implementation of primary health care as well as a more in depth discussion of the eight components of primary health care.

Step 4
(25 min)

Discussion of PHC Approaches

Reconvene the large group and ask the selected persons from each group to present a summary, not longer than 3-5 minutes, of their articles. Based on their understanding of the different approaches to PHC as presented in the summaries of the articles, have the group discuss and list on newsprint the pros and cons of the different approaches, and decide which ones they feel will be most effective in attaining "Health For All By The Year 2000".

Trainer Note

This discussion should be most provocative given the different approaches to PHC that they have just reviewed and shared in their brief presentations. In this 25 minute discussion the participants should direct their discussion to various aspects or approaches to PHC, some of which include questions concerning:

- What are the different approaches presented in these articles and on what key issues do they differ?
- Is there coordination of the health and health related sectors? (e.g. agriculture, education, finance)
- What are the social and economic determinants of health and ways PHC approaches affect these determinants?
- How is or how should PHC be supported within the national health system?
- What should be the focus of PHC programs?
- What are the constraints on implementing a complete PHC program?
- How should these constraints be addressed? (For example, should they concentrate on two or three particular PHC activities and worry about integrating other activities later when more funds are available?)
- What is or should be the role of international agencies in PHC?
- How does "political will" affect or impact on the PHC approach of providing health for all?
- What does it mean "Health: A Time for Justice" and how does this relate to primary health care?

Step 5
(15 min)

Summarizing Primary Health Care

Lead a short discussion on summarizing PHC. Focus this discussion around the following questions:

- From what we have seen and discussed thus far concerning primary health care, how would you explain the meaning of this concept to someone?
- What generalizations can we make about primary health care and its effectiveness as a means of promoting positive health and development?
- We have seen that a key concept in the primary health care approach is integration. Where do you think problems might arise in trying to integrate the various components of primary health care services?
- How will what you have learned during this session help you in promoting primary health care in your primary job assignment? Through secondary activities?
- What are the controversial issues surrounding primary heatlh care?

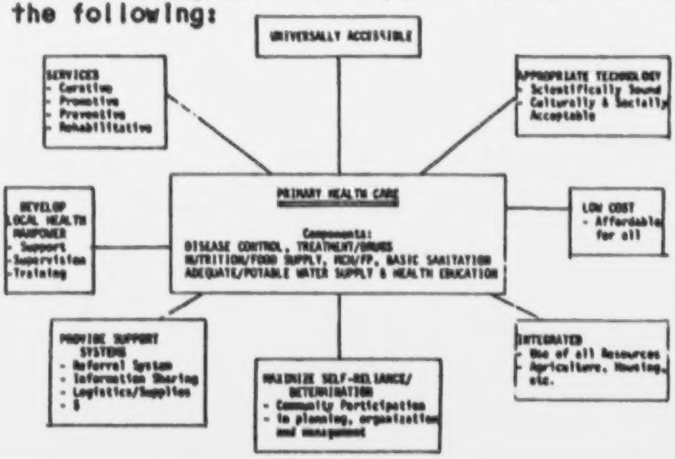
Step 6
(20 min)

The Role of the Peace Corps Volunteer in Primary Health Care

Based on their understanding of Primary Health Care and the discussions in Session 5 on their roles as health educators, ask the group to discuss and develop a diagram for Primary Health Care, identifying where they think they as health care generalists/educators fit in.

Trainer Note

An example of a diagram that may be developed and used for discussion is the following:


UNIVERSALLY ACCESSIBLE
SERVICES
- Curative
- Promotive
- Preventive
- Rehabilitative
APPROPRIATE TECHNOLOGY
- Scientifically Sound
- Culturally & Socially Acceptable
PRIMARY HEALTH CARE
Components:
DISEASE CONTROL, TREATMENT/DRUGS
NUTRITION/FOOD SUPPLY, MCH/FP, BASIC SANITATION
ADEQUATE/POTABLE WATER SUPPLY & HEALTH EDUCATION
DEVELOP LOCAL HEALTH MANPOWER
- Support
- Supervision
- Training
LOW COST
- Affordable for all
PROVIDE SUPPORT SYSTEMS
- Referral System
- Information Sharing
- Logistics/Supplies
- $
MAXIMIZE SELF-RELIANCE/ DETERMINATION
- Community Participation
- in planning, organization and management
INTEGRATED
- Use of all Resources
- Agriculture, Housing, etc.

Alternate Step 3 (30 min) **"That Our Children Will Not Die"**

Show the film "That Our Children Will Not Die".

Trainer Note

Ask a participant to set up the projector and run the film. Introduce this activity while one of the participants is setting up the projector. Explain that the film they are going to watch discusses a primary health care approach in a particular part of Africa. Advise them to watch the film, keeping in mind the eight basic principles of PHC that they have just discussed, and to identify ways in which they have been incorporated.

Alternate Step 4 (30 min) **Discussion of the PHC Approaches**

After viewing the film, have the group engage in a discussion on how practical the PHC approach is in achieving the health care needs of an individual, family and community, and what are some of the difficulties in implementing this strategy.

Trainer Note

In this 30 minute discussion, the participants should direct their discussion to various aspects or approaches to PHC some of which include questions concerning:

- From what you saw in the film, what were the major health problems and needs of the people in the area where primary health care was practiced? Do these problems differ from what you might find in the U.S.? How?
- How were these problems and needs identified? Handled? Specifically, how did this primary health care approach solve health problems/meet health needs? Were the people involved in helping themselves? How?
- Of the key elements of primary health care outlined before the film, which ones were incorporated into the health care approach in the film? Was the health care accessible, acceptable, affordable? How? Were the elements integrated?
- What would you say were the essential components of the primary health care approach in the film? Food and nutrition? Sanitation? Maternal and child health? Family planning? Immunization?
- Do you see any ways in which a PC Health Worker might fit into a process/approach like the one illustrated in the film?

HEALTH: A TIME FOR JUSTICE

OURS IS PERHAPS the first generation in history which has the knowledge and resources to achieve a great improvement in the health of all mankind. Yet hundreds of millions live out lives darkened by malnutrition and infectious diseases. In developing and industrialized countries, good health for all is far from being a reality.

But this need not be so. There is a ground swell worldwide to bring about social and economic changes that will raise dramatically the level of health for all. Where the political will exists, a great improvement in general health can be achieved, even in the course of one decade.

How can this be done? Through a new approach, already proven in practice, of providing primary health care.

Primary Health Care is essential health care made accessible to everyone in the country; care given in a way acceptable to individuals, families, and the community, since it requires their full participation; health care provided at a cost the community and the country can afford.

The Primary Health Care approach forms an integral part of the country's health care system, of which it is the keystone, and of the overall social and economic development of the nation and the community. Primary Health Care attacks the main health problems facing the community, and does so through promotive, preventive, curative and rehabilitative actions as they are needed. Since these actions grow out of the real-life conditions and social values of each country, they vary from country to country. Since underdevelopment and poverty are major factors in causing ill-health, national development can contribute greatly to better health; especially those components that raise the incomes of the poor, such as rural development, agrarian reform, and the promotion of employment.

Actions taken to improve health will accelerate economic development by building community self-reliance, overcoming apathy, improving the quality of labour, reducing the burden of ill-health, and expanding labour-intensive services. The Primary Health Care approach draws largely on community resources that otherwise would remain untapped. At the same time, Primary Health Care raises the standard of living of the mass of the population by adding a component of "health income", thus contributing directly to economic development goals.

Though no single model is applicable everywhere, Primary Health Care should include the following:

- Promotion of proper nutrition
- An adequate supply of safe water
- Basic sanitation
- Maternal and child care, including family planning
- Appropriate treatment for common diseases and injuries
- Immunization against major infectious diseases
- Prevention and control of locally endemic diseases
- Education about common health problems and what can be done to prevent and control them

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Primary Health Care: How it works

Primary Health Care seeks to bring about the overall promotion of health:

- by giving the individual, the family and the community responsibility for Primary Health Care, with support from the national health care system;
- by the active participation of the community in defining its needs and finding ways to satisfy them;
- by using community as well as national resources;
- by using simpler and less costly technology;
- by mobilizing other sectors, such as education, agriculture, housing, public works, information and communications and industry.

Primary Health Care recognizes that in order to achieve good health people must have the *basic necessities of life:* e.g. enough food to eat and plenty of safe water. It emphasizes the need for a safe environment and for people to understand the role they themselves can play in improving health and in promoting socio-economic development. This approach has evolved as a result of the hard experience of countries in the promotion of the health of their people.

Self-reliance and community participation

There is much that an active and self-reliant people can do to improve their health. Indeed, better health is not simply a commodity that can be delivered to the people. Its attainment requires their enlightened participation, as individuals, families and communities, in measures to prevent; to control and to treat disease.

The necessity fo· community participation has often been overlooked in national development and health programmes. Communities have important resources comprising human intelligence and ingenuity, labour, materials and money. The creative use of these resources opens up dramatic new possibilities for the improvement of health.

Individuals and families cannot become real agents of their own development unless they are given the opportunity to identify their true health needs, to assess the existing situation and to suggest how problems may be solved, using all available resources. Within a national strategy of Primary Health Care, individuals and their communities can help plan health care activities, and participate in the process of providing services. Individuals should accept a high degree of responsibility for their own health care, recognizing how the health of each person and each family contributes to the development of the community. This includes adopting a healthy life style, ensuring good nutrition and hygiene, and proper use of immunization services. Mothers deserve particular attention as they carry a major responsibility for the health of infants and children, the most vulnerable members of society. Within the community, actions to improve health should provide visible results and fulfil expectations in a short time. This may range from building an irrigation ditch or constructing a school, with community participation, to promoting immunization and improved nutrition.

In many countries, the process of community participation may lead to the selection by the community of one of their own people to serve as a Primary Health Care worker. After appropriate training and with continuing support from the national health service, the Primary Health Care worker, who may be a volunteer or work part-time, will become the main agent for preventive and curative action in the community, with the support of conventional health services.

Just as a part-time Primary Health Care worker cannot go it alone, the community too needs continuous help in many forms. The health system must provide education and information about the causes and prevention of illnesses, about the implications of the solutions being proposed and their costs. An adequate and continuing supply of basic drugs, and adequate equipment for Primary Health Care workers is also required.

Training of primary health workers

Training of primary health workers and the retraining of existing workers should be undertaken at the nearest point to their communities, and should address itself to the most urgent local problems. Practical and non-formal approaches can be used in continuing education, including learning by doing, in-service training during visits by supervisors and frequent short courses. This is essential because the demands on primary health workers will increase and because the health situation will be changing. The training of primary health care workers is a formidable task because of the large numbers and because of the variety of education techniques involved. Hence, special preparation of trainers, who will also participate in supervision, is a prerequisite.

New challenges to the existing health system

Introducing Primary Health Care into all communities will greatly increase the demands on existing services in terms of training, supervision, logistical support and referral care. The redistribution of functions involved in the new approach will also make for a more efficient use of health personnel and health facilities. Professional personnel and hospitals will no longer be dealing with minor ailments and problems but will direct their resources to more complicated problems beyond the competence of primary health workers.

To assure the success of this approach to Primary Health Care, all categories of existing health personnel—professional and auxiliary—will need to be reoriented so as to gain their understanding and support. They will need to realize that community level Primary Health Care is not reducing their status and responsibilities; it is enhancing them. In some situations, they will need additional training in their supportive and referral functions. The basic training of all health personnel will also need to be reviewed and adapted so as to fit them for different functions at various levels of the health systems.

Appropriate technology

Primary Health Care needs scientifically sound techniques that are acceptable to the community and within economic reach. Attempts to bring health care and protection to people in need are still hampered in many places by the absence of simple, low-cost materials, and techniques that are designed for local conditions.

This technology must be in keeping with local customs and traditions.

It should be easily understood and applied by community health workers and be capable of adaptation or development as conditions change. The identification of such technology must be considered when formulating a national strategy for Primary Health Care. Such technologies now are available, for instance, to ensure safe cold storage of vaccines, to sterilize medical equipment in the field and diagnose anaemia in villages. Medicinal drugs are an important element in health technology. A model list of some 200 essential drugs now is available, and can be used to select those drugs required locally to deal with specific conditions. It is an advantage if both drugs and equipment can be manufactured locally.

No community need wait for basic improvements in such things as environmental sanitation until large-scale, expensive means are brought to bear. Work on water supply and waste disposal, for example, is already underway. Sophisticated technology may not be the most suitable, and it is often the most expensive; the cost is high, even for industrialized countries. The important thing to discover is what can do the job and what the community can afford.

More equitable and more efficient use of resources

In many countries today, 80 per cent of the health budget is still spent on 20 per cent of the population. As a result, rural people and the urban poor are neglected and still have little contact with conventional health systems. Only through active community participation, and equitable reallocation of growing national resources can maximum impact on the health of the total population be achieved.

Scarcity of resources can no longer serve as an excuse for not providing better health care for all. Better use of existing resources, fairer distribution of what is available and the use of untapped resources within the community can go a long way to improving the situation. But community, non-government and local governmental resources must all be used, following an overall plan, for any rapid advance to be made.

More rational use of national resources will also contribute to narrowing the resource gap. More rational use means providing better referral services, and the supplies and equipment the community is unable to obtain for itself. If countries are to develop Primary Health Care on a self-reliant basis, most of the resources must come from within; and along with the growth of national resources, a process of reallocation and equitable sharing becomes essential.

It has already been pointed out that community participation brings significant new resources into improving health. Although the resources of communities are limited, experience shows that many communities are willing and able to pay some part of the costs of basic health care, besides contributing labour and materials. These community resources will go directly to the support of Primary Health Care.

But community resources are not sufficient. Government aid is required for training, supervision, referral services and logistical support. In most countries this means increasing the amount and the proportion of funds in the national budget supporting Primary Health Care. As the national health budget gradually increases, the new money will go to extending health to unserved communities rather than, for example, constructing hospitals in cities.

In this new ordering of the health system, the nation will be getting more for its money. For one thing, there will be a reduction in preventable diseases; and this in itself will result in substantial savings in supplies and staff time. Concurrently, common illnesses which now take up so much of the time and facilities of the health services will be dealt with effectively and at much less cost in the communities. Sophisticated and expensive health resources will be used in more selective and appropriate ways.

Food for health

More than half of the deaths of children in developing countries are directly related to poor nutrition and a large proportion of those who survive are physically stunted; for many, mental development is retarded. Thousands become blind from an early age because of vitamin A deficiency. Lack of food and iron-deficiency limits the work capacity of the labour force. Furthermore, these nutritional deficiencies increase the risk at childbirth both for mother and baby, and contribute to high maternal mortality and the delivery of small, weak babies who are susceptible to diseases and early death.

The first step in dealing with nutrition is seing that people get enough of the right food. Food must be made more abundant and more accessible to the millions who need it and cannot afford to buy enough to keep their families healthy. This may mean new ways of farming, new crops and changes in land tenure. In addition to an increase in quantity, sound education is needed to encourage people to make better use of locally available foods. A handful of green vegetables a week can prevent vitamin A blindness. A little iodine added to salt can prevent goitre. By careful mixed feeding and giving young children enough solid food, serious nutritional diseases such as marasmus and kwashiorkor can be avoided. The danger of malnutrition in pregnancy can be prevented by giving mothers a little more of their accustomed diet.

Just as food is needed, so are good eating habits. Mother's milk, for example, is the best and safest food for babies everywhere and breast feeding should be encouraged. Young children's foods can be prepared from locally available resources. Cleanliness in the preparation and storage of food goes a long way in preventing infection.

It is essential that early in life children receive a diet that will ensure a healthy growth and an effective immune response. Without the latter immunization programmes will be less effective.

The environment as an ally: Enough safe water and a safe environment

The importance of improving the environment so that it promotes rather than undermines the health of the individual is fundamental to the Primary Health Care approach. Formal health activities and medical care cover only a very small part of a person's life, even for someone who is repeatedly ill; most of one's life is spent working and living far from the walls of a clinic. Therefore the way in which people lead their lives, and the setting in which they do it affects their health and that of others around them to a vast extent.

Water, for example, can help a community to health in many ways or on the other hand it can menace its well-being. Where water is abundant and safe, a number of diseases will be greatly reduced or eliminated. Where water is scarce and polluted, nothing can prevent high infant mortality and constant attacks by

gastro-intestinal disease on all members of the community. Malnutrition can result from infestations and worms and frequent diarrhoea.

More is needed than greater quantities of water. It is important to avoid polluting water and its surroundings. The proper disposal of human waste is crucial. This waste can become valuable compost or a focal point for contamination and a breeding place for insects that carry disease. The water in drains, rubbish, and the excreta of man and animals can either be used as a resource or pose a dangerous threat to health.

Prevention of disease

The Primary Health Care approach lays stress on prevention, which is the first line of defence against disease and ill-heath. Most of the measures required can be carried out within the community itself, using local people and local resources, backed by support from the national health service and other agencies of government.

Improvements in the environment, provision of adequate water and proper nutrition, as outlined above, will go a long way in the prevention of diseases that are currently causing ill health and death in the world.

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Other programmes such as family health, family planning and immunization against several of the major killing diseases, can also reduce illness and suffering, particularly among mothers and children. To make any real difference, immunization must reach everyone who needs it. Steps in this direction include simplified immunization techniques, firm administrative procedures and enlisting the help of the community, to see that those who need protection receive it. In many cases, better ways of producing and distributing the vaccine will be needed. These have been worked out in many countries, using imagination, local cooperation and hard work.

A national policy:
Coordinated suppon at all levels

Although no single model of Primary Health Care can be applicable everywhere, in all cases there must be a national policy and political will. Furthermore, this approach should encourage the community to become actively involved from the very first stages. Primary Health Care means a close partnership between community and government in the development of resources and health care, and involves a continuous dialogue between them. The community must identify itself with the purposes and activities that are called for. Planning, shaping of specific activities, evaluation and modification should all be carried out with the participation of the people.

Government activities should be oriented in order to encourage and support community actions. These should include intersectoral planning and coordination, and the identification and reallocation of resources to provide the personnel, material and finances needed to support the community.

Solutions to national and local health and development problems can only be found through mutual support and collaboration. All levels of government—district, provincial and national—must commit themselves to coordinating and reallocating their resources to meet the real needs of the people. This requires decentralization of operational responsibilities and the coordination of sectorial activities so that the overall goal of health through development can be achieved. Implicit in this partnership is the involvement of members of the community in identifying what they feel are the most pressing problems they face and in determining priorities and solutions they feel will work in their local setting.

Health is not a separate entity. This is why Primary Health Care has to be unequivocally supported at the national level as part of the government's overall national plan for total development.

A matter of will

The Primary Health Care approach is already being applied in many countries. It involves a political commitment to reorient national development, to direct increased resources to the underserved majority and often to increase health budgets substantially.

For industrialized countries, a Primary Health Care approach means rationalizing their health systems and controlling and redirecting soaring expenditures from hospital-based, high-cost technology towards basic care for all. It also means a commitment to assist the developing countries, and particularly the least developed, in carrying out the Primary Health Care approach, as an integral part of rural and urban development.

The world has the resources and know-how to achieve a significant improvement in health now. But improved health will be slow to reach the majority of the people through mere economic growth, or by reinforcing present structures and techniques.

Primary Health Care, as part of the dynamic development process, offers a practical means to better health for all. Justice in health requires concerted action by the international community to provide generous and flexible aid to developing countries through the adoption of Primary Health Care.

Given the political will, a workable national plan and the support of the people, Primary Health Care can become a reality anywhere in the world.

JUSTICE IN HEALTH

Hundreds of millions live out
lives darkened by malnutrition
and infectious diseases.

Yet this need not be so...

(From: Public Information Division, World Health Organization. Geneva, 1978)

WATER SUPPLY AND HEALTH IN DEVELOPING COUNTRIES: SELECTIVE PRIMARY HEALTH CARE REVISITED

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Primary health care (PHC) and selective primary health care (SPHC)

In the health delivery systems of most developing countries, the bulk of available resources are devoted to curative services delivered from urban hospitals (Stern, 1983). With the exception of a few vertical programs, such as smallpox and yaws programs, health services have remained largely curative and largely unavailable to poor urban and especially rural people.[2] There have, however, been some dramatic exceptions to this general pattern. Of particular importance is the health care delivery system developed in the world's most populous country, The People's Republic of China,[3] but equally striking successes have been achieved in Sri Lanka, India, Vietnam, and Cuba.[2,4,5,6]

In the light of the failure of most countries to deliver health services to the majority of their people and the success of other countries with similar resource bases to reach this goal, the WHO, UNICEF, and other international agencies embarked on an ambitious effort to encourage more countries to adopt the principles which had proved so successful in the above-mentioned countries.

At the Alma Ata Conference in 1978, the characteristics of the successful systems were analyzed and the concept of PHC defined and endorsed by all participating countries. Of particular importance in this definition is the explicit recognition given to the multiple causes of poverty and the manifestation of these causes in ill health, with the strategy therefore being defined as a multifactorial approach rather than simply a set of medical activities. In particular, PHC was to include:

> . . . education concerning prevailing health problems and the methods for preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases, prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs.[7]

Shortly after Alma Ata, two biomedical scientists, Walsh and Warren,[8] published a critique of this PHC concept in the *New England Journal of Medicine.* This critique and the alternative "selective primary health care" (SPHC) concept advocated by Walsh and Warren have received widespread and generally favorable attention in the scientific and development communities.

The reasoning behind the concept of selective primary health care is simple. While the adherents to the idea profess sympathy to the concept of comprehensive PHC as expressed in the Alma Ata Declaration, they are acutely aware of limitations on the resources available to developing countries for implementing primary health care programs and argue that insufficient resources are available for implementation of all components of the original PHC program. What is necessary, then, is to examine each possible item in the overall program individually, to determine what the costs of implementing that item are, and what the effectiveness of the program is in reaching any particular objective, such as reducing infant mortality. The items are then ranked in terms of cost-effectiveness, and the "selective primary health care" program is designed to include the most cost-effective items within the overall budgetary constraints pertaining in any particular circumstances.

The approach is thus presented as simply a minor modification of the original concept expressed in the Alma Ata Declaration, a modification which adheres to the principles of Alma Ata, but makes the concept of primary health care operational and implementable.

The SPHC package emerging from the cost-effectiveness calculations is almost exclusively medical, including measles and diptheria-pertussis-tetanus vaccinations, treatment for febrile malaria, oral rehydration for diarrhea in children, and tetanus toxoid in mothers. Biomedical research for the development of vaccines and therapies for major tropical diseases, too, are considered "cost-effective." More systemic non-medical activities, such as community water supply and sanitation and nutrition supplementation, are rejected as being "non cost-effective."

The rationale of the SPHC approach has been widely accepted by both the scientific community (a computer search turned up dozens of references to the original article, with virtually all the articles accepting the premises of the SPHC approach *in toto)* and by policymakers in many international agencies, with the recent USAID health sector policy[9] an outstanding example of the application of these principles.

The purpose of this paper is to examine the details of the cost-effectiveness calculations with respect to one of the components of PHC (viz., community water supply), the choice of the measures of effectiveness chosen, and the methodology followed in comparing activities which fulfill different objectives. The rationale behind SPHC is also examined in terms of the light which this rationale can shed on the experience of both successful and unsuccessful national and pilot projects. The article concludes with a consideration of the programmatic and political consequences of SPHC vis-a-vis PHC.

The details of the water supply and sanitation cost-effectiveness calculations

As indicated earlier, a computer search was carried out to identify articles in the scientific literature which referenced the original Walsh and Warren article. Many of these references referred to the original article only to reinforce a contention that a particular field of inquiry was important, but some of the articles present a criticism of the details of the cost-effectiveness calculations pertaining to a particular sector, the objective usually being to argue that the ranking of the specialty of the particular author should have been higher than indicated by Walsh and Warren.

In this spirit, a critique of the numbers used by Walsh and Warren in assessing the cost effectiveness of investments in water supply and sanitation is presented in this section.

The data used by Walsh and Warren for the capital costs of water supply and sanitation programs are based on recent and widely verified World Bank data, and, aside from noting that in certain circumstances (such as tubewells in rural Bangladesh[10] and latrines in Zimbabwe[11]) the per capita costs may be an order of magnitude less than the costs used by Walsh and Warren, there is no basis for disagreement with the cost data used.

What is apparently not appreciated by Walsh and Warren, however, is that, whether or not there are additional investments in water supplies, people in many Third World settings (particularly in urban areas) pay substantial amounts of money for poor-quality water supplies. A well-documented, but by no means unique, case is that of poor people in Lima, Peru,[12] the results of which are summarized on Table 1 below.

Table 1

THE QUANTITIES OF WATER USED AND EXPENDITURES ON WATER IN LIMA, PERU

Quality of Service	*Quantities used (l/cap/day)*	*Monthly Household Expenditures on Water (soles)*
Poor (vendors)	23	105
Medium (standpipe)	78	22
Good (house connection)	152	35

Table 1 shows that improvements in the quality of water supply service in urban areas may be associated not with an increase, but a reduction in the monetary costs of the supply, a finding by no means unique to Lima. One of the most experienced water supply engineers in the world has found this phenomenon to be virtually universal in developing countries and has concluded that "if daily expenditures made to a water carrier were invested instead in a proper piped supply, far more economical and better water service could be provided."[13]

In terms of a cost-effectiveness analysis of the sort used by Walsh and Warren, then, the economic cost of such water supply improvements may be much smaller than the overall cost of the project, since much or often all of the costs can be covered by "simply" redirecting expenditures which are already being made by the population for an inferior water supply service. Since the Third World is rapidly becoming as much an urban as a rural world, since similar willingness-to-pay is often demonstrated by rural inhabitants,[14] and since those urban dwellers paying high costs for poor water supplies are those urban dwellers with the highest incidences of disease, this phenomenon is of major importance in terms of improving health through the investment of relatively few outside resources. The rub, of course, is in the word "simple," for these poor urban residents are frequently not recognized as either legitimate or deserving by their governments, and the organizational and managerial implications of these changes are by no means trivial. A key issue, then, is political will and program management, themes to which attention is directed later in this paper.

Turning to the denominator in the cost-effectiveness factor, an assessment of the likely impact of a water supply and sanitation program on health is far more problematic than the assessment of the effects of other PHC programs which operate more directly on the causes of disease. Thus, while it is a relatively straightforward (although not trivial) task to calculate the effects of a tetanus or measles vaccine on death rates, a similar assessment of the effects of a water supply and sanitation program is fraught with problems, for the intervening steps linking the program inputs to health outputs are far more numerous and the necessary behavioral changes far more complex. In particular, the assumption that the water supply produces the quantity and quality of water for which it was designed is frequently incorrect, as is the assumption that the water supply is being used appropriately by the classes or age groups most affected by water-related diseases.[15]

In light of these problems, it is appropriate to proceed with caution in attempting to assign a "typical value" to the effect of water supply and sanitation programs on health.[16] In their analysis, Walsh and Warren drew on only a small sample of the large number of available studies and reached universal conclusions which are not supported by a more comprehensive assessment. For instance, Walsh and Warren concluded that while water piped into the home might result in substantial reductions in diarrheal diseases, water supplied through public standpipes would affect only a very small reduction (about 5%) in the incidence of diarrheal diseases. While this was certainly the conclusion to be drawn from the couple of studies examined by Walsh and Warren, fundamental doubts have been raised about the results of one of the studies,[17] and a more complete analysis of methodologically sound, available studies would have indicated that where improved quantities of water of improved quality became available through standpipes, the expected reductions in diarrheal diseases would be an order of magnitude greater than the 5% assumed by Walsh and Warren. This is indicated on Table 2, which is abstracted from a recent comprehensive review of the health effects of water supply and sanitation programs.

Table 2

THE EFFECT OF WATER SUPPLY AND PROGRAMS IN 24 NONINTERVENTION STUDIES[18]

Parameter Affected	*Number of Studies*	*Reduction in % Diarrheal Diseases (median)*
Water quality	6	30%
Water availability (mostly through standpipes)	11	34%
Quality and availability	4	40%
Excreta disposal	8	40%

There are reasons, then, to believe that the figures used by Walsh and Warren in both the denominator and numerator of the cost-effectiveness calculations for water supply and sanitation programs are seriously in error. Furthermore, since the approach taken by Walsh and Warren is one in which the cost-effectiveness of different components of PHC are compared, it is pertinent to note that there are also serious problems with the costs and effectivenesses used by Walsh and Warren for the more traditional medical components, which their analysis suggested were most appropriate in a "selective" approach. Specifically, in the examination of several small, nongovernmental health projects[19] which served as a basic source of data for the Walsh and Warren analysis, "costs generally did not include capital investment, training, expenditures beyond the primary level of health care, or the value of expatriate and volunteer labor."[20] In scaling these projects to a national level, the costs would be substantially greater and the effectiveness of the programs substantially less due to "political and administrative problems."[20] Indeed, the generalizability of these findings has been questioned by many (including the Director General of the WHO[21]), with the comments on the Indian project being typical: "It was the dedication of the team leaders, their total involvement in the community programs, and their special organizational abilities which made the program successful."[22]

However, as will be detailed in the following sections, the "selective primary health care" analysis of Walsh and Warren is, in our opinion, flawed by fundamental conceptual problems which are much more serious than the problems of detail outlined above. For this reason it is not appropriate to attempt to present revised cost-effectiveness figures for water supply and sanitation programs and other components, or to suggest, on the basis of such revised estimates, an alternative hierarchy of programs for "selective primary health care."

The criteria used for assessing the effectiveness of health programs: what are the objectives and who decides on these?

Health is a multifaceted concept. At the most elementary level, it is possible to distinguish between severity of effect (infection, disease, disability, and death) and age group affected (infant, child, or adult). A fundamental difficulty in comparing different health programs is that, typically, different programs affect different facets of health. One program, for instance, may affect infant mortality only, while another might affect infection, disease, disability, and mortality in all age groups.

Decision theory offers only some simple concepts in suggesting how to analyze trade-offs between programs which affect different facets of health in this way. In particular, with reference to Figure 1, decision theory tells us only that, if outcome 1 and outcome 2 are both desirable, and if the costs of the programs represented on the diagram are equal, then program B is always preferable to program A, and program C is always preferable to program A (a concept known as "Pareto optimality"). Decision theory tells us explicitly that, if we are unable to reduce output one and output two to a common measure (such as dollars), then the only way of resolving whether program B is preferable to program C is to submit the choice to decision makers and have them tell us which program is preferable.

It is immediately apparent, then, that two questions are of fundamental importance in attempting to compare different health programs:

1. What are the health outcomes which will be considered?

2. Who will be the judges of the trade-offs between these outcomes?

A first concern with the procedure followed by Walsh and Warren is their choice of criteria and the consistency (or lack thereof) in applying these to the components of PHC which they analyze. For the most part, Walsh and Warren consider reductions in infant mortality to be the unique criterion of interest, thus comparing, for instance, the cost per infant death averted through water supply and sanitation programs, and expanded immunization and oral rehydration therapy programs. This lands them in a bind, of course, for such a procedure means that all programs which do not result primarily in reductions in infant mortality (one of these considered by Walsh and Warren is an onchocerciasis control program) will automatically be rejected. The procedure followed by Walsh and Warren, then, is to write down that onchocerciasis control programs "prevent few infant deaths," leaving the reader to assume, reasonably, that onchocerciasis control programs may be justified on grounds other than reductions in infant deaths.

So far so good. With respect to the example which is followed through the present analysis — water supply and sanitation — Walsh and Warren follow a quite different procedure. Since it is never argued that the only effect of a water supply and sanitation program is a reduction in infant mortality, the only consistent procedure would be to repeat the procedure followed in the onchocerciasis control program and make no comparison between a water supply and sanitation program with a program the unique effect of which is to reduce infant mortality. This Walsh and Warren do not do. Instead, they compare water supply and sanitation programs with programs aimed specifically at reducing infant mortality (such as oral rehydration therapy programs) and conclude, not surprisingly, that the programs which affect infant mortality only are more effective in this than a program which has multiple effects on all manifestations of disease in all age groups. If we imagine that "outcome 1" on Figure 1 represents reductions in infant mortality and outcome 2 some other desirable outcome (such as reduction in adult morbidity), then Walsh and Warren's procedure is equivalent to claiming that program B is superior to program C simply because B gives us more of outcome 1 than C (ignoring the fact that C gives us more of desirable outcome 2 than B). This procedure is obviously unsatisfactory.

As indicated earlier, trade-offs between different outcomes cannot be considered in isolation from the decision as to who will make such trade-offs. While Walsh and Warren could almost certainly defend their choice of reduction in infant mortality as an important criterion, other scientists would claim that other criteria (such as morbidity in the adult population[23]) are important, too. Where different criteria are used, of course, the cost-effectiveness of different programs will be quite different. For example, in the case of cholera, whereas rehydration therapy has been shown to be less costly and more effective in saving lives than immunization, if morbidity reduction becomes the objective, the results of a cost-effectiveness analysis would be reversed.[23]

In the spirit of John Grant, however, who argued that primary health care and other development programs should follow "the principle of inherent need and interest," in which "projects in a village should grow out of its own needs and interests, and not be superimposed by some idealists,"[24] we would argue that the trade-offs between the outputs of PHC programs be done in light of the expressed needs of the communities involved. From an examination of the actual health and nutrition practices of families in the developing world, it is clear that their de facto priorities do not agree with the assumption of Walsh and Warren that reductions in infant mortality are of unique concern. In particular, throughout the developing world the economic welfare of families is highly dependent upon the economic production of adults,[23] giving rise, for example, to discrimination in feeding among household members to protect the actual or potential breadwinner in subsistence settings.[25]

In assessing actual practices, however, attention has to be given to the fact that families, like villages, are not division-free entities, and it is necessary to go one step further and ask whose interests in the family should be given greater weight.

From a variety of perspectives it seems clear that the group whose needs are most important, in terms of the health of the community in general and young children in particular, are mothers. First, virtually all components of PHC programs are based on the assumption that mothers will be the most important front-line providers of health care to children.[26] Second, of all the correlates of infant health, none is as strong or as consistent as mother's education,[27] implying that there are few better investments in health than those which meet the needs of women, particularly those which alleviate the constraints limiting the education of girls and women. Later in this paper it is argued that a particularly important constraint faced by women in undertaking, to use James Grant's term,[28] "discretionary activities," such as education and child care, is the enormous demands made on women for performing time-consuming, repetitive tasks. Investments which relieve mothers of part of this burden will have an effect on child health which is as certain as it is impossible to quantify.[16] Indeed, many experienced investigators of the determinants of health in the Third World would concur with Latham,[29] who has argued that "attentions to women's rights and the emancipation of women may ultimately have more impact on nutrition and infection in developing countries than any of the (conventional nutrition and health) interventions."

Concerned, then, with the exhortation of the Director General of the WHO that mothers become the subject and not the object of health programs, the following sections of this paper assess some principal constraints aired by women in implementing PHC programs.

Women as the front-line health care workers: some constraints

A concept central to all PHC programs is that no lasting advances in child health can be made unless the mother is involved in these programs. Thus, most of the core elements of PHC programs — such as breastfeeding, supplementary feeding, oral rehydration therapy, and household hygiene — involve the mother as the front-line health worker. Indeed, the objective of PHC programs may be described as the improvement of "mothering, the poorly-defined but crucial interactions between mother and child that form the principle determinants of health, growth and development."[30]

To carry out the complex and demanding task being set her by primary health care programs, the mother faces four principal constraints, namely, technology, knowledge, resources, and time. One way of visualizing PHC programs is that such programs are aimed at relieving the mother of one or more of these constraints so that she may become a more effective mother.

In their analysis of "selective primary health care," Walsh and Warren focus their attention almost exclusively on the first of these four constraints, technology, an approach common to the policy formulations of some development agencies, too. While there is no doubt that technological advances, such as improved expanded vaccination programs and oral rehydration therapy, open new vistas in terms of the potential for child health in developing countries, the provision of improved technology alone is insufficient, for usually the effective implementation of such technology requires simultaneous inputs of knowledge, resources, and time on the part of the mother. Let us consider a few examples.

Breastfeeding. Primary health care programs provide both information to the mother on the fundamental importance of breastfeeding for the health of her infant and technology in the form of programs designed to monitor the growth of her child. While such programs are essential, equally essential is the availability of time for the women to breastfeed their babies. Studies throughout the world have shown that where women work outside of the home, they do not have the time available to breastfeed their babies, with the result that the inputs of knowledge and technology provided by the PHC program cannot be translated into improved child-rearing practices. (A typical finding is that of a study in Malaysia, where women recently employed breastfed their children 33% less time than women in a control group who had not recently been employed.[31])

Oral rehydration therapy. ORT technology undoubtedly opens entirely new possibilities for the reduction of mortality in young children in developing countries. As in all other cases, however, the provision of the technology alone will have little impact unless the constraints faced by the mother in using the technology are addressed simultaneously. The constraints are many: in many areas of the world, the cost of rehydration packages is too great for poor families;[32] in almost all situations, traditional understanding of food and liquid withdrawal during diarrhea have to be changed,[33] and thus the ORT technology has to be accompanied by educational and informational inputs. Finally, since "continually giving a sick infant large volumes of liquid by spoon or cup is time-consuming, tiring, and inconvenient for an overburdened mother with other children plus household and farm work to do, ORT may require the commitment of more time and energy than she can easily provide."[34]

Clinic-based suppplementary feeding and other programs. Perhaps the simplest of all programs, in principle, is one in which the mother comes to a clinic or distribution center to collect food for her child, to weigh her child, or to have her child immunized. Yet many studies have shown that attendance at a clinic drops off dramatically as the distance to a clinic increases[35] and that women in the labor force are frequently unable to avail themselves of such services because of the constraints on their time.[36]

Food preparation and storage. Recent longitudinal studies in Bangladesh[37] and The Gambia[38] have documented the vital role of food contamination on the transmission of diarrheal diseases, an effect which becomes particularly marked when great demands are made on the time of the mother. In The Gambia, for instance, at the peak diarrheal transmission season, "feeding of small children is particularly haphazard . . . infants may be left in the compound in the care of young nursemaids with a supply of porridge or gruel for the next 8 or 9 hours, and food for the evening meal is sometimes stored over-night . . ."[38]

In sum, the great demands placed on the time of Third World mothers constitute a serious barrier to the implementation of PHC, with these constraints often being particularly acute at those times of the year when children have most need of additional health care[39] and in low-income families where the incidence of illness is greatest.[40]

The overall effect of restrictions in the availability of time is evident in recent data from the Philippines. Although the children of working mothers received 5% more food than the children of a comparable group of mothers who were not working, the children of the working mothers weighed, on the average, 7% less than the children of the mothers who did not work, an effect attributed to the lack of time available to working mothers to translate increased resources and improved knowledge into improved health of their children.[41]

Thus, although improved water supply and sanitation conditions affect PHC in several ways — by reducing the disease load (see Table 2) and thus the need for child care, by increasing available income through reducing payments for water (see Table 1), and by releasing the calories used in carrying water (12% of a woman's caloric intake in East Africa)[42] — most important of all effects may be increasing the time available to mothers for carrying out child care and other "discretionary activities."

Time and mothers' needs in developing countries

A recent workshop in "Women in Poverty" examined the phenomenon of poverty among women in the Third World and analyzed how women might become actors in and beneficiaries of the development process.

Three conclusions of this workshop are of particular importance for PHC. First, time is the most important resource which poor women have available to them.[31] Second, studies in a variety of developing countries (Bangladesh, Bolivia, Indonesia, and the Philippines) have found that the rural mother engages in ten to eleven hours per day of active home and market production,[40] whereas women in industrialized countries typically work at and outside the home only six hours per day.[31] And third, poverty is concentrated in female-headed households, and the number of these households is large (typically between 15% and 35%) and increasing.[31] Thus, the workshop concluded that, for women in developing countries, "saving time is development, for time saved from humdrum tasks is time to invest in human capital,"[31] and that priority should be given to "technologies that reduce the time women and children spend fetching wood and water and preparing food."[31]

Time required for water collection

The impact of the installation of a convenient village water supply system on the time spent by women and children in carrying water has been documented throughout the world.[16] To give just a few of many examples: in the lowlands of Lesotho, 30% of families spend over 160 minutes per day collecting water;[43] as a result of improved water supplies in the Zaina scheme in Kenya, about 100 minutes per household per day are saved from the water-collecting activity;[44] in East Africa, rural families spend up to 264 minutes per day carrying water;[42] in East Nigeria, families spend up to 300 minutes per day collecting water.[43] Studies in Asia (for example, the Philippines[41] and Thailand[14]), too, have documented the substantial amount of time spent in collecting water in many areas.

Felt needs of low-income women

It would thus appear that a major constraint on women's "discretionary activities" (including child care) in many developing countries is the enormous demand made on their time for the performance of repetitive, time-consuming tasks. It has further been documented that in many rural communities the fetching and carrying of water is one of the most important of these tedious tasks. What do the low-income women of the Third World have to say about this when they are asked directly, when they are treated, as Halfdan Mahler would have, as subjects and not just as objects in the development process?

In looking for answers to this question, it bears repeating that societies in general, and societies in developing countries in particular, are typically sharply divided along class and sex lines. Earlier in this paper it has been argued that particular attention should be paid to the concerns of poor women, yet determining the concerns of this largely disenfranchised group is not simple, for two main reasons. First, the sexual divison of labor is universal, with the time-consuming tasks performed by women seldom, if ever, being performed by men; and, second, "the decision-makers or leaders in the agencies and in the target communities are usually men and they communicate with other men and not with the women."[45] Thus, as has been documented for Kenya,[45] the reduction in time-consuming tasks like fetching and carrying water is a high priority need for rural women, but is typically given low priority when the "village leaders" (men) are asked for their opinion.

Where surveys of community needs have been aware and taken account of such factors, throughout the developing world water supply has ranked high on the list of expressed priorities.[46] In a recent review of the findings of surveys of low-income women in developing countries, water supply improvements were found to "rank right alongside the most basic human need (adequate food) in many (such) surveys."[40]

Cost effectiveness revisited

Returning to the decision model outlined earlier, it is thus apparent that when, first, outcomes of programs are not arbitrarily restricted solely to reductions in infant mortality and, second, the trade-offs between outcomes are made by poor Third World women and not scientists, water supply programs routinely constitute an integral part of PHC programs in those (large) areas of the developing world in which access to adequate water supplies is restricted.

It is thus not surprising that, in all countries in which PHC has been successful, improvements in water supply and sanitation conditions have been an integral part of strategies for both improving health and improving the status of women.[47,48]

Summary and conclusions

Six years after Alma Ata, what is the prospect for the PHC philosophy as outlined in the Alma Ata Declaration? On the one hand, the concept is clearly a viable one which has been implemented successfully in a number of large, low-income developing countries and with considerable, if only temporary, success in a number of pilot projects in developing countries which have made little progress at the national level.[19] The overwhelming reality, however, is that in those countries which had made little progress before Alma Ata, little progress in implementing PHC programs has been made since.[27] Simplifying a complex debate, there have been two main contending theses explaining this failure. On the one hand, many have seen the failure of PHC programs in most developing countries as a predictable consequence of a "lack of political will," while others have focused on technical factors, such as the scarcity of resources for implementing PHC programs and the necessity for making cost-effectiveness choices on components to be included in an overall PHC program.

For those who favor the technical interpretation of this experience, the "selective primary health care" approach of Walsh and Warren is an insightful and pragmatic tool to be used in making choices in the light of the "resource scarcity," about which interventions are "cost effective." This analysis, as has been shown in this paper, is fundamentally flawed. If the problem is a problem of "resource scarcity," how is it that several low-income countries have implemented strikingly successful PHC programs, while many other countries with higher GNPs per capita have failed completely? If the problem is the comprehensive nature of the Alma Ata formulation of PHC, then how is it that all of the successful national programs have taken such a comprehensive approach? And if water supply and sanitation programs are not "cost-effective," why is it that all of the countries in which PHC has been effective have made improvements in water supply and sanitation a cornerstone to their PHC approach? In summary, although the approach taken by Walsh and Warren and used as a basis for sector strategies by some international development agencies has a certain appeal to fundamental notions of rational planning, the approach fails totally to account for the experience which has been accumulated with PHC programs throughout the world. This being the case, then, there are several critical questions. Is there an alternative interpretation which explains the experience with PHC programs more satisfactorily? If so, what are the implications of this alternative interpretation for policy? And, finally, why has the obviously flawed "selective PHC" approach proved to be so compelling and attractive to some development agencies?

Even the technically focused analyses of the SPHC sort usually mention in passing the "importance of political will and management" in the implementation of PHC programs. An alternative explanation for the success of some national PHC programs and the failure of others considers this factor of political will to be fundamental rather than incidental. The importance of this commitment is evident from both longitudinal and cross-sectional observations. Thus, history shows that prior to World War II cogent blueprints for appropriate health services were drawn up for both China and India (in the form of the Bhore Commission Recommendations of 1943). To John Grant, who played a major role in this process in both countries and who recognized that "the use of medical knowledge . . . depends chiefly upon social organization,"[24] subsequent developments could have been no surprise. Where the government made a fundamental commitment to meeting the health (and other) needs of all people, as in China, enormous progress was made in developing an appropriate health delivery system. Where no such commitment was made, as in India, health services changed little over the intervening forty years.[49] Similarly, a contemporary cross-sectional comparison of countries which have made marked progress in the development of health services for all, with those countries in which adequate services have been developed for only a small minority, shows that progress has been rapid only where "health and health care became a political goal and eventually came under political control as a part of overall development."[2]

To the proponents of this alternative interpretation, the experience of the successful non-governmental PHC health projects which are the object of so much attention in the cost-effectiveness analyses, too, is consistent with this theory on the centrality of political commitment. For what distinguishes these successful small projects from the unsuccessful national projects in the same countries is not the resources available nor the choice of technology, but that, through dedication and management, these programs have managed to overcome the problem of the lack of political will that characterized the national programs in these countries.[21,22,27]

Thus, the concerns of the technical analysts with "resource constraints" and the use of "non cost-effective technologies" appear to be either false problems or second-order problems. The problem of "resource scarcity" is a problem wrongly named, for it is clear that this problem arises not because there are insufficient resources for the health sector, but because the vast majority of these resources, both public and private, are devoted to an existing urban, hospital-based, capital-intensive health care system serviced by and meeting the needs of an elite minority.[1] The problem of appropriate technology is a real one, and there is no doubt that, where political commitment exists, PHC programs will become more effective through the use of ORT, expanded immunization programs, improved low-cost sanitation technologies, and other technological improvements. This does not imply, however, that an enormous amount cannot be done with existing technologies. The successful experiences in China, Sri Lanka, Cuba, Vietnam, and India all demonstrate the progress that can be made without the technological advances which some international development agencies suggest to be the major impediment to improving health in developing countries. Indeed, what the experience of the successful national PHC programs shows is that the issue of appropriate technology is intimately related to the issue of political commitment, as is evident in the development and widespread use of innovative "appropriate" solutions to the problem of sanitation technology in both China[50] and Vietnam[51] and the imaginative incorporation of traditional medicine into a modern health care delivery system in China.[27]

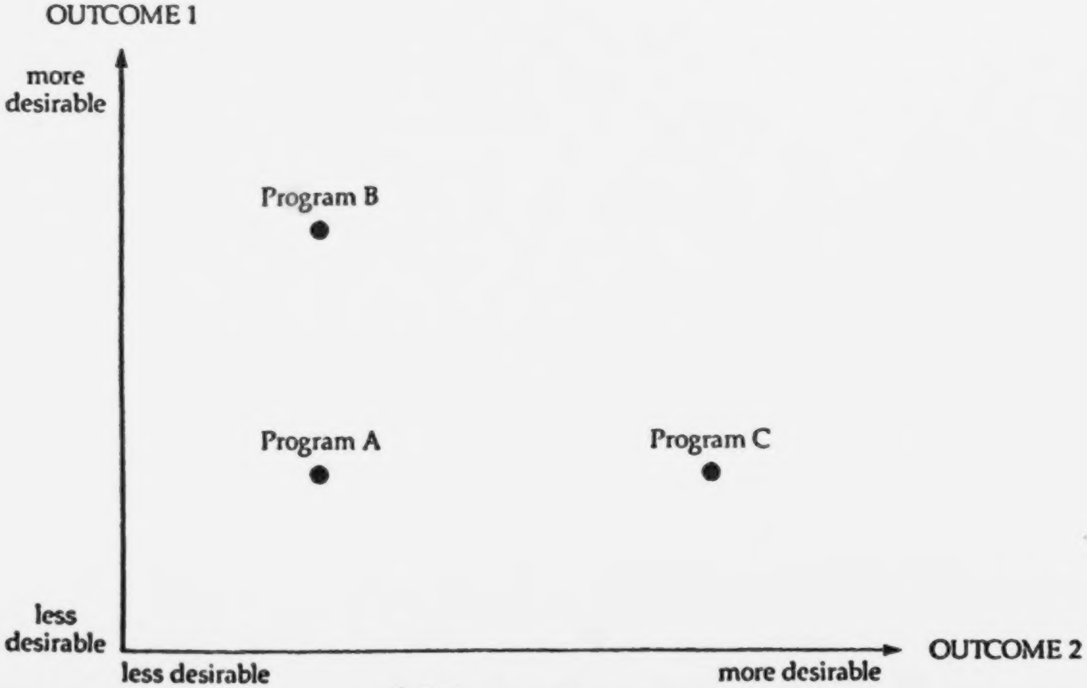
Given these manifest shortcomings of the Walsh and Warren type of approach, why has it proved to be so attractive to certain development agencies and many developing country governments?

First, the only reasonable conclusion from the evidence is that credit for the success, or blame for the failure, of national PHC programs lies squarely with the government of the country concerned. Where PHC programs have failed, this is because the commitment of the government to "health for all" its people is little more than empty rhetoric.

The implication for development agencies with a genuine concern for the health of all people has been stated by one of the pioneers of the PHC

Figure 1

THE CHOICE OF PROGRAMS WITH DIFFERENT OUTPUTS



movement: "Where support is available, let it be selectively directed to those countries which already have, or are taking steps to develop, a form of decision-making and implementation which is likely to be effective."[7] Since the support of some development agencies for certain countries has more to do with political imperatives than a true concern for the health of the people of that country, such agencies use analyses, such as that presented by Walsh and Warren, to deflect responsibility for death and illness from its true source, namely, the home governments and their international supporters, and to assign responsibility for such suffering to "neutral" causes, such as "resource shortages" and "the limitations of technology." In short, "selective primary health care" is not, as the authors would suggest, a practical modification of the PHC concept, but rather a negation of much that was positive in the PHC approach formulated at Alma Ata.

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SELECTIVE PRIMARY HEALTH CARE

An Interim Strategy for Disease Control in Developing Countries

JULIA A. WALSH, M.D., AND KENNETH S. WARREN, M.D.

Abstract Priorities among the infectious diseases affecting the three billion people in the less developed world have been based on prevalence, morbidity, mortality and feasibility of control. With these priorities in mind a program of selective primary health care is compared with other approaches and suggested as the most cost-effective form of medical intervention in the least developed countries. A flexible program delivered by either fixed or mobile units might include measles and diphtheria–pertussis–tetanus vaccination, treatment for febrile malaria and oral rehydration for diarrhea in children, and tetanus toxoid and encouragement of breast feeding in mothers. Other interventions might be added on the basis of regional needs and new developments. For major diseases for which control measures are inadequate, research is an inexpensive approach on the basis of cost per infected person per year. (N Engl J Med 301:967-974, 1979)

THE three billion people of the less developed world suffer from a plethora of infectious diseases. Because these infections tend to flourish at the poverty level, they are important indicators of a vast state of collective ill health. The concomitant disability has an adverse effect on agricultural and industrial development, and the infant and child mortality inhibits attempts to control population growth.

What can be done to help alleviate a nearly unbroken cycle of exposure, disability and death? The best solution, of course, is comprehensive primary health care, defined at the World Health Organization conference held at Alma Ata in 1978 as

> the attainment by all peoples of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. Primary health care includes at least: education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition, an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs.[1]

The goal set at Alma Ata is above reproach, yet its very scope makes it unattainable because of the cost and numbers of trained personnel required. Indeed, the World Bank has estimated that it would cost billions of dollars to provide minimal, basic (not comprehensive) health services by the year 2000 to all the poor in developing countries. The bank's president, Robert McNamara, offered this somber prognosis in his annual report in 1978:

> Even if the projected — and optimistic — growth rates in the developing world are achieved, some 600 million individuals at the end of the century will remain trapped in absolute poverty. Absolute poverty is a condition of life so characterized by malnutrition, illiteracy, disease, high infant mortality and low life expectancy as to be beneath any reasonable definition of human decency.[2]

How then, in an age of diminishing resources, can the health and well-being of those "trapped at the bottom of the scale" be improved before the year 2000? A valid approach to this overwhelming problem can be based on the realization that the state of collective ill health in many of the less developed countries is not a single problem. Traditional indicators, such as infant mortality or life expectancy, do not permit a grasp of the issues involved, since they are actually composites of many different health problems and disorders. Each of the many diseases endemic to the less developed countries (Table 1) has its own unique cause and its own complex societal and scientific facets; there may be several points in the process for which interventions could be considered.[3-5]

Thus, a rationally conceived, best-data-based, selective attack on the most severe public-health problems facing a region might maximize improvement of health and medical care in less developed countries. In the discussion that follows, we try to show the rationale and need for instituting selective primary health care directed at preventing or treating the few diseases that are responsible for the greatest mortality and morbidity in less developed areas and for which interventions of proved efficacy exist.

ESTABLISHING PRIORITIES FOR HEALTH CARE

Faced with the vast number of health problems of mankind, one immediately becomes aware that all of them cannot be attacked simultaneously. In many regions priorities for instituting control measures must be assigned, and measures that use the limited human and financial resources available most effectively and efficiently must be chosen. Health planning for the developing world thus requires two essential steps: selection of diseases for control and evaluation of different levels of medical intervention from the most comprehensive to the most selective.

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Selecting Diseases for Control

In selecting the health problems that should receive the highest priorities for prevention and treatment, four factors should be assessed for each disease: prevalence, morbidity, mortality and feasibility of control (including efficacy and cost).

Table 2 incorporates these factors into an analysis of three representative illnesses of the less developed world. The newly discovered Lassa fever was associated with a 30 to 66 per cent mortality rate in the few limited outbreaks recorded in Nigeria, Liberia and Sierra Leone. Those who survived recovered fully after an illness lasting seven to 21 days. Although this fatality rate seems to suggest giving Lassa fever high priority in a major health program, the prevalence of overt disease appears to be low. Furthermore, the only treatment available is injections of serum from patients who have recovered. Since its mode of transmission is unknown and there is no vaccine, Lassa fever is impossible to control at present.[6] Therefore, concentration on preventing Lassa fever would be neither efficient nor efficacious.

Ascaris, the giant intestinal roundworm, causes the most prevalent infection of man, with one billion cases throughout the world.[7] Yet disability appears to be minor and death relatively rare.[3,4] Treatment, however, requires periodic chemotherapy for an indefinite period.[3,4,8] Control may ultimately require massive, long-term improvements in sanitary and agricultural practices to reduce reinfection. In view of the difficulty of eliminating exposure to the roundworm and the low morbidity associated with the infection, ascariasis deserves less attention than its ubiquity seems to suggest.

Malaria is associated with a far smaller mortality rate than that of Lassa fever and a far lower prevalence that that of ascariasis. Yet its mode of transmission is well known, and it produces much recurring illness and death; about one million children in Africa alone die annually from malaria.[9] What also distinguishes malaria from Lassa fever and ascariasis is that it can be controlled through regular mosquito-spraying programs or chemoprophylaxis.[3,9] Of these three infections, then, malaria would be assigned the highest priority for prevention in the most effective approach to reducing morbidity and mortality.

By means of the process outlined above for Lassa fever, ascariasis and malaria, the major infections endemic to the developing world (Table 1) were evaluated and assigned high (I), medium (II) or low (III) priorities. Within categories exact rank is not of major importance, and rank may change or items may be added or deleted, depending on the geographic area under consideration. For instance, schistosomiasis, to which a high priority was assigned, does not occur in many areas of the developing world. Our re-

Table 1. Prevalence, Mortality and Morbidity of the Major Infectious Diseases of Africa, Asia and Latin America, 1977-1978.*

INFECTION	INFECTIONS (THOUSANDS/YR)	DEATHS (THOUSANDS/YR)	DISEASE (THOUSANDS OF CASES/YR)	AVERAGE NO. OF DAYS OF LIFE LOST (PER CASE)	RELATIVE PERSONAL DISABILITY†
Diarrheas	3-5,000,000	5-10,000	3-5,000,000	3-5	2
Respiratory infections		4-5000		5-7	2-3
Malaria	800,000	1200	150,000	3-5	2
Measles	85,000	900	80,000	10-14	2
Schistosomiasis	200,000	500-1000	20,000	600-1000	3-4
Whooping cough	70,000	250-450	20,000	21-28	2
Tuberculosis	1,000,000	400	7000	200-400	3
Neonatal tetanus	120-180	100-150	120-180	7-10	1
Diphtheria	40,000	50-60	700-900	7-10	3
Hookworm	7-900,000	50-60	1500	100	4
South American trypanosomiasis	12,000	60	1200	600	2
Onchocerciasis					
Skin disease	30,000	Low	2-5000	3000	3
River blindness		20-50	200-500	3000	1-2
Meningitis	150	30	150	7-10	1
Amebiasis	400,000	30	1500	7-10	3
Ascariasis	800,000-1,000,000	20	1000	7-10	3
Poliomyelitis	80,000	10-20	2000	3000+	2
Typhoid	1000	25	500	14-28	2
Leishmaniasis	12,000	5	12,000	100-200	3
African trypanosomiasis	1000	5	10	150	1
Leprosy		Very low	12,000	500-3000	2-3
Trichuriasis	500,000	Low	100	7-10	3
Filariasis	250,000	Low	2-3000	1000	3
Giardiasis	200,000	Very low	500	5-7	3
Dengue	3-4000	0.1	1-2000	5-7	2
Malnutrition	5-800,000	2000			

*Based on estimates from the World Health Organization and its Special Programme for Research and Training in Tropical Diseases, confirmed or modified by extrapolations from published epidemiologic studies performed in well defined populations (see references). Figures do not always match those officially reported, because under-reporting is great.

†1 denotes bedridden, 2 able to function on own to some extent, 3 ambulatory, & 4 minor.

Table 2. An Approach to the Establishment of Priorities for Disease Control, Based on Prevalence, Mortality, Morbidity and Feasibility of Control of Three Representative Infections.

INFECTION	PREVALENCE	MORTALITY	MORBIDITY	FEASIBILITY OF CONTROL	PRIORITY
Lassa fever	Unknown (thought to be low)	High (30–66%)	Moderate (bedridden 7–21 days)	Extremely poor at present	Low: prevalence low, feasibility of control poor
Ascariasis	Extremely high (thought to affect 1 billion people)	Extremely low (approximately 0.001%)	Low (minor disability & often asymptomatic)	Poor (continuous drug treatment required)	Low: mortality & morbidity low, feasibility of control poor
Malaria	High (more than 300 million infected annually)	Low (approximately 0.1%)	High (severe, many complications, often recurrent)	Good (chemoprophylaxis available; regular spraying programs for vectors practical)	High: prevalence high, morbidity high, feasibility of control good

sults and rationale for the proposed hierarchy are listed in Table 3.

Group I contains the infections causing the greatest amount of most readily preventable illness and death: diarrheal diseases, malaria, measles, whooping cough, schistosomiasis and neonatal tetanus. With the exception of schistosomiasis, all the infections receiving highest priority for health-care planning affect young children more than adults.[10-14] Together with respiratory infections and malnutrition, they account for most of the morbidity and mortality among infants and young children.[11,15-17] Members of this age group (five years old or less) have a death rate many times greater than that of their counterparts in Western countries — accounting for 40 to 60 per cent of all mortality in most less developed countries.[11,17-19] If infant and child deaths from these infections are reduced, a large decline in the overall death rate will result. Such a situation would be an optimal outcome of a selective disease-control program.

Groups II and III contain health problems that are either less important or more difficult to control. Respiratory infections, a major cause of disability and death, are not listed in Group I because of the difficulties involved in preventing and managing them. A wide variety of viruses and bacteria are associated with pulmonary infections, and no specific causative agent has been found in most patients.[16,20] As in the industrialized world, where pneumonia is frequently the terminal episode in elderly patients weakened by cancer or cardiovascular disease, lower-respiratory-tract infections affect children in developing countries who are already afflicted with chronic malnutrition and parasitic infections.[16] Pneumococcal and influenza vaccines prevent only a small percentage of cases, and influenza immunization must be given almost yearly because the virus changes antigenically. When penicillin injections were given to all children with clinical signs of pneumonia in the Narangwal Project in India, the mortality rate decreased by 50 per cent,[21] but this method must be evaluated more extensively before it can be regarded as a major improvement in prevention of respiratory disease.

A medium or low priority was assigned if control measures were inadequate. For example, there is no acceptable therapy for chronic Chagas' disease.[3,4] Only toxic drugs and procedures of unknown efficacy, such as nodulectomy, are available for treatment of onchocerciasis.[3,4] Leprosy and tuberculosis require years of drug therapy and even longer follow-up

Table 3. Priorities for Disease Control in the Developing World, Based on Prevalence, Mortality, Morbidity and Feasibility of Control.

PRIORITY GROUP	REASONS FOR ASSIGNMENT TO THIS CATEGORY
I High	High prevalence, high mortality or high morbidity, effective control
Diarrheal diseases	
Measles	
Malaria	
Whooping cough	
Schistosomiasis	
Neonatal tetanus	
II Medium	
Respiratory infections	High prevalence, high mortality, no effective control
Poliomyelitis	High prevalence, low mortality, effective control
Tuberculosis	High prevalence, high mortality, control difficult
Onchocerciasis	Medium prevalence, high morbidity, low mortality, control difficult
Meningitis	Medium prevalence, high mortality, control difficult
Typhoid	Medium prevalence, high mortality, control difficult
Hookworm	High prevalence, low mortality, control difficult
Malnutrition	High prevalence, high morbidity, control complex
III Low	
South American trypanosomiasis (Chagas' disease)	Control difficult
African trypanosomiasis	Low prevalence, control difficult
Leprosy	Control difficult
Ascariasis	Low mortality, low morbidity, control difficult
Diphtheria	Low mortality, low morbidity
Amebiasis	Control difficult
Leishmaniasis	Control difficult
Giardiasis	Control difficult
Filariasis	Control difficult
Dengue	Control difficult

periods to ensure cure.[4,11,15] Instead of attempting immediate, large-scale treatment programs for these infections, the most efficient approach may be to invest in research and development of less costly and more efficacious means of prevention and therapy. To reiterate, the most important factor in establishing priorities for endemic infections, even when evaluating diseases with high case rates, is a knowledge of which diseases contribute most to the burden of illness in an area and which are reasonably controllable.

EVALUATING AND SELECTING MEDICAL INTERVENTIONS

Once diseases are selected for prevention and treatment, the next step is to devise intervention programs of reasonable cost and practicability. The interventions relevant to the world's developing areas that are considered below are comprehensive primary health care (which includes general development as well as all systems of disease control), basic primary health care, multiple disease-control measures (e.g., insecticides, water supplies), selective primary health care, and research. Below is a discussion of each approach, with emphasis on the relative cost involved in undertaking and maintaining these programs and on the benefits that have accrued.

This section of our analysis relies on reported results from individual studies conducted in various parts of the world. In addition, we have examined estimates of cost and effectiveness in terms of expected deaths averted by each intervention for a model area in Africa. The model area is an agricultural, rural portion of Sub-Saharan tropical Africa with a population of about 500,000 (100,000 are five years old or less). For reference purposes, the average figures for Sub-Saharan Africa will be used: the birth rate is 46 per thousand total population, the crude death rate 19 per thousand total population, and the infant mortality rate 147 per thousand live births.[24,25]

Comprehensive versus Basic Primary Health Care

Comprehensive primary health care for everyone is the best available means of conquering global disease, the humane and noble goal declared at Alma Ata. As defined by the World Health Organization, this system encompasses development of all segments of the economy, ready and universal access to curative care, prevention of endemic disease, proper sanitation and safe water supplies, immunization, nutrition, health education, maternal and child care and family planning. Since resources available for health programs are usually limited, the provision of comprehensive primary health care to everyone in the near future remains unlikely.

Basic primary health-care systems are far more circumscribed in their goals, which are to provide health workers and establish clinics for treating all illnesses within a population. Nevertheless, this approach is far from inexpensive. The World Bank has estimated that the cost of furnishing basic health services to all the poor in developing countries by the year 2000 will be $5.4 to $9.3 billion (in 1975 prices).[26] This investment, which includes only initial capital investment and training costs, would provide one community health worker or auxiliary nurse-midwife for every 1500 to 2000 people and one health facility for every 8000 to 12,000 people or every 10 km², whichever is greater. In the model area in Africa, the World Bank estimated that supplying the minimum care offered by building one health post with one vehicle per 10,000 people and training 125 auxiliary nurse-midwives and 250 community health workers would cost $2,500,000, or $5 per capita. To this figure must be added the recurrent costs of salaries, drugs, supplies and maintenance. Other costs not included are for training facilities, continuing education, expansion of referral services and development of communication, transportation and administrative networks to supply and manage the health facilities. Furthermore, the effectiveness of this model program for averting deaths or applying such preventive measures as education in sanitation and nutrition has not been clearly established.

The pilot projects for providing basic health-care services that have been evaluated vary in their effectiveness in improving the general level of health care. For example, an outside evaluation of primary health service in Ghana revealed that a third to half the population of the districts lived outside the effective reach of health units providing primary care. Only about one fifth of the births were supervised by trained midwives; only one fifth of the children under the age of five years had been seen in a child-health clinic, and two thirds of the population lacked environmental sanitation services. Furthermore, the services were often of poor quality, notably in the crucial area of child care.[27,28]

The cost and effectiveness of several experimental programs providing primary health care in localized areas have been compared in Imesi, Nigeria[29]; Etimesgut, Turkey[30,31]; Narangwal, India[21]; Jamkhed, India[32,33]; Guatemalan villages[34]; Hanover, Jamaica[35-37]; and Kavar, Iran.[38] The estimated cost per capita varied widely among the programs, particularly because they were initiated at different times over the past 15 to 20 years and furnished different services to their communities. In general, however, the cost per capita ranged between 1 and 2 per cent of the national per capita income of the particular country. The cost for infant deaths averted were difficult to compare because of the paucity of control groups and inconsistency of the population groups monitored. Figures ranged from $144 to $20,000, with a median of $700. The only precise calculations for the costs per infant death averted ($144) or child death averted ($988 per one to three-year-old child) were for a medical-care and nutrition-supplementation project in Narangwal, India.[21] The estimates were much higher for deaths averted by nutrition supplements.

Under some circumstances, programs of basic primary health care have been successful, but the cost and the degree of improvement in community health have varied markedly enough that refinements in the approach are still needed.

Multiple Disease-Control Measures

These interventions, which include vector control, water and sanitation programs and nutrition supplementation, are more specific and easily managed than primary health-care programs, and they control many similarly transmitted diseases simultaneously. They can decrease mortality and morbidity and have served as interim strategies for health care in less developed countries.

Vector Control

Vector control is directed at managing the insects and mollusks that carry human disease. This approach has the advantage of being comparatively inexpensive, but it must be continued indefinitely and may be ephemeral since the vectors tend to become resistant. The examples below reveal some of the complexities of maintaining vector control.

The control of malaria transmission through insecticides has been highly effective. In the tropical regions and savannas of Africa, twice-yearly spraying has decreased the crude death rate by approximately 40 per cent and infant mortality by 50 per cent.[39-41] The World Health Organization has estimated that the average cost for house-to-house spraying with chlorophenothane (DDT) is $2 per capita annually.[9] Therefore, the cost per adult and infant death averted is $250, and the cost per infant death averted is $600. Unfortunately, eradication of malaria with insecticides is becoming more difficult to accomplish. Because mosquitoes can be expected to become resistant to DDT within a few years, other, much more expensive pesticides must be substituted; the use of propoxur or fenetrithion will raise the cost of the chemicals five to 10 times.[9] Furthermore, there is no way of knowing how long these insecticides will remain toxic to the mosquitoes. Among the mosquitoes in which widespread resistance to insecticides has developed are *Culex pipiens fatigans*, the major vector of urban filariasis, and *Aedes aegypti*, the vector of yellow fever and dengue.[5]

Two other vector-control programs illustrate the prolonged maintenance required by this type of health intervention. Onchocerciasis, a potentially blinding helminth infection affecting 30 million people in Africa, is being managed in the Volta River Basin through a 20-year larvicide operation to control the blackfly vector. The program is estimated to cost $18 per capita for the entire 20-year period or $.90 per capita per year.[36] Disability will be prevented, and economic activity in the area may increase if the program is successful, but continuous, indefinite applications of insecticide will be necessary. Since 1965, St. Lucia has had a program to control the snail-transmitted helminth infection schistosomiasis through molluscicides. An annual cost per capita of about $3.70 and good results have been reported: the prevalence of the infection has decreased from 45 to 35 per cent in adults and from 21 to 4 per cent in children. Despite these heartening figures, eradication of the vector cannot be considered on the horizon. Schistosomiasis is a long-term, chronic infection and the death rate will not begin to decline until many years after continuous mollusk control.

Water and Sanitation Programs

Proper sanitation and clean water make a substantial difference in the amount of disease in an area, but the financial investment involved is enormous. The success of such projects also depends on rigorous maintenance and alteration of engrained cultural habits.

With the installation of community water supplies and sanitation in developing areas, deaths from typhoid can be expected to decrease 60 to 80 per cent,[43] deaths from cholera 0 to 70 per cent,[43-48] from other diarrheas 0 to 5 per cent,[48-51] from ascaris and other intestinal helminths 0 to 50 per cent[8,10,52-54] and from schistosomiasis 50 per cent[42,52] (after 15 to 20 years). The World Bank has estimated that the cost of providing community water supplies and sanitation to all those in need by the year 2000 will be $135 to $260 billion.[26,55] Construction of a rural community standpipe costs $20 to $26 per capita, and rural sanitation costs $4 to $5 per capita. In urban areas the costs are $31 and $23, respectively. In our model area of Sub-Saharan Africa the initial investment would be $12 to $15 million. If amortization and annual maintenance costs are only 10 per cent of this sum, the annual cost per deaths averted will be $2400 to $2900, and the cost per infant and child deaths averted will be $3600 to $4300.

What must be realized is that the above sums are largely for public standpipes, which are not highly effective in reducing morbidity and mortality from water-related diseases. It is well documented that connections inside the house are necessary to encourage the hygienic use of water.[56] For example, shigella-caused diarrheas decreased 5 per cent with outside house connections but fell 50 per cent when sanitation and washing facilities were available within the home.[51]

All these estimates depend on exclusive use of protected sanitation and water supplies, without continuing use of environmental sources. In Bangladesh, for example, there was no reduction in cholera in areas supplied with tube wells, primarily because of the use of contaminated surface water as well as the protected water supply.[47] In St. Lucia, contact with surface water could not be discouraged until household water supplies and then swimming pools and laundry units were installed, and an intensive health-education campaign was instituted.[42] In other words, changing peoples' habits in excretion and water usage takes more than introducing an adequate, dependable and convenient new source. Realistically speaking, a pervasive and effective health-education campaign[37,38] is required.

Nutrition Supplementation

Nutrition programs have been advocated as among the most efficient means of decreasing morbidity and mortality in children, but supplementation alone has had no notable effect. Malnutrition is an underlying or associated factor in many deaths from infections in children; in a group of Latin American children, it was associated in 50 per cent of the cases.[39] Poor nutrition may also increase susceptibility to disease or predispose an infected child to more severe illness.[40-42] Conversely, infection may be a prominent cause of poor nutrition[41,43-46] since less food is ingested and absorbed by a sick child. Therefore, if infections could be controlled it is probable that the nutritional status of children would improve greatly. There have been some situations, however, in which malnutrition has been reported to protect against certain infections, e.g., the Sahel famine was thought to suppress malaria, and iron deficiency was reported to protect against bacterial infections.[47-50]

In view of these findings, it is not surprising that few nutrition-supplementation programs alone have effected a major decrease in the death rate. The Narangwal Project is one of these few, but even in that program the cost per death averted in infants was $213. In children one to three years old the cost was $3000 — 1.5 to three times higher than the cost of medical care alone.[31]

Selective Primary Health Care

The selective approach to controlling endemic disease in the developing countries is potentially the most cost-effective type of medical intervention. On the basis of high morbidity and mortality and of feasibility of control, a circumscribed number of diseases are selected for prevention in a clearly defined population. Since few programs based on this selective model of prevention and treatment have been attempted, the following approach is proposed. The principal recipients of care would be children up to three years old and women in the childbearing years. The care provided would be measles and diphtheria–pertussis–tetanus (DPT) vaccination for children over six months old, tetanus toxoid to all women of childbearing age, encouragement of long-term breast feeding, provision of chloroquine for episodes of fever in children under three years old in areas where malaria is prevalent and, finally, oral rehydration packets and instruction.

If even 50 per cent of the children and their mothers and 50 per cent of the pregnant women in a community were contacted, deaths from measles would be expected to decrease at least 50 per cent,[71,72] deaths from whooping cough 30 per cent,[73] from neonatal tetanus 45 per cent,[74] from diarrhea 25 to 30 per cent[75,76] and from malaria 25 per cent.[9] Oral rehydration has been used successfully in hospitals,[77,78] in outpatient clinics[79] and recently in the home[75,76] to treat diarrheas of numerous causes.

These services could be provided by fixed units or by mobile teams visiting once every four to six months in areas where resources were more limited. Mobile units have been successfully used in immunization programs for smallpox and measles,[80,81] in treatment services directed against African trypanosomiasis and meningitis[82] and in provision of child care in rural areas.[83-85]

The cost of fixed units would be similar to that of basic primary health care, although efficiency should be much greater. Cost estimates for a mobile health unit used in the model area in Africa for malaria control and water and sanitation programs were based on an extensive study of the Botswana health services by Gish and Walker.[85] They estimated $1.26 as the cost per patient contact in 1974, on a sample 306-km trip that reached 753 patients; the estimated cost per infant and child death averted was $200 to $250. Medications accounted for 30 to 50 per cent of this cost, but this figure could be decreased with contributions of drugs from abroad or their manufacture within the country.

Whether the system is fixed or mobile, flexibility is necessary. The care package can be modified at any time according to the patterns of mortality and morbidity in the area served. Chemotherapy for intestinal helminths, treatment of schistosomiasis and supplementation with new vaccines or treatments as they become available are all types of selective primary health care that could be added or subtracted to this core of basic preventive care. It is important, however, for the service to concentrate on a minimum number of severe problems that affect large numbers of people and for which interventions of established efficacy can be provided at low cost.

Research

For a number of prevalent infections, treatment or preventive measures are expensive, difficult to administer, toxic or ineffective. These infections, which include Chagas' disease, African trypanosomiasis, leprosy and tuberculosis, may better be dealt with through an investment in research. In terms of the potential benefits, the cost of research is low. Indeed, the total amount now being spent on research in all tropical diseases is approximately $60 million, exceedingly small in relation to the number of people infected. As Table 4 shows, expenditures for research on some of the major diseases in the developing world have by far the lowest per-capita cost of all medical interventions discussed.[86]

The estimated cost for the research and development leading to the pneumococcal vaccine licensed in the United States in 1978 was $3 to $4 million (Austrian R: personal communication). Death and disability in developing countries would be reduced by heat-stable vaccines for measles, malaria, leprosy and rotavirus and *Escherichia coli*-induced diarrheas,

Table 4. Research Funding for Major Diseases of the Developing World, 1978.

INFECTION	AMOUNT OF FUNDING ($)	COST/INFECTED PERSON/YR ($)
Malaria	15,000,000	0.02
Schistosomiasis	7,000,000	0.04
Filariasis	2,000,000	0.01
Trypanosomiasis	5,000,000	0.38
Leishmaniasis	1,200,000	0.10
Leprosy	2,000,000	0.16

by improved chemotherapy for leprosy, tuberculosis, American and African trypanosomiasis, onchocerciasis and filariasis and by depot drugs for malaria and intestinal helminths.

CONCLUSIONS

Until comprehensive primary health care can be made available to all, services aimed at the few most important diseases (selective primary health care) may be the most effective means of improving the health of the greatest number of people. The crucial point is how to measure the effectiveness of medical interventions. In all the foregoing calculations, we based our analysis of cost effectiveness on changes in mortality or deaths averted. We did not measure the illness and disability that would be prevented. No other benefits for which intervention may have been responsible were measured because they are much more difficult to quantify. The inadequacy of available data makes it impossible to measure distinct and undeniable secondary benefits. For example, water supplies close by would save time for the women who carry water, and increased amounts could irrigate a home garden.

Accordingly, Table 5 summarizes the estimated costs per capita and per death averted for the various health interventions considered. The per capita costs are calculated in terms of the entire infant, child and adult population of the area covered by the service. As the table suggests, selective primary health care may be a cost-effective interim intervention for many less developed areas.

Table 5. Estimated Annual Costs of Different Systems of Health Intervention.

INTERVENTION	PER CAPITA COST ($)	COST PER INFANT AND/OR CHILD DEATH AVERTED* ($)
Basic primary health care†		
Range	0.40–7.50	144–20,000 (I)
Median	2.00	700
Mosquito control for malaria	2.00	600 (I)
Onchocerciasis control program	0.90	Few infant & child deaths
Mollusk control for schistosomiasis	3.70	Few infant & child deaths
Community water supplies & sanitation	30–54	3600–4300 (I,C)
Narangwal nutrition supplementation	1.75	213 (I) 3000 (C)
Selective primary health care‡	0.25	200–250 (I,C)

*I denotes infant & C child.

†Delivered by village health workers.

‡In this case, delivered by mobile units.

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Session 6

HEALTH CARE DELIVERY SYSTEMS

TOTAL TIME 2 hours

OVERVIEW

To work effectively in their communities, PCV's need an understanding of the governmental structure of the host country, in particular the health care delivery system. In this session, participants analyze the organization, priorities and goals of the country's health system as they relate to other parts of the government and they identify Primary Health Care activities within this structure. As part of the exercise, participants also generate questions to ask host country nationals and representatives of international agencies who will visit the workshop during Session 7.

This session relates to and draws upon those aspects of core curriculum training and the Role of the Volunteer in Development and Cross Cultural training which cover the governmental framework.

OBJECTIVES

- To generate a list of questions to ask agency and ministry representatives about the role of the PCV in PHC during Session 3.
  (Steps 1-7)
- To describe the organization and roles of formal and traditional health personnel and facilities in the host country's health care delivery systems.
  (Steps 1, 3)
- To identify the national agencies, ministries and international organizations with which the Volunteers will work or interface.
  (Steps 1, 4)
- To explain the host country's health plan and/or national policy on Primary Health Care.
  (Step 2)

RESOURCES

- Role of the Volunteer in Development (Peace Corps)
- Cross Cultural Training (Peace Corps)

Handouts:
- 6A Organizational Chart of Governmental Structure (to be developed by trainer)
- 6B Organizational Chart of National Health System (to be developed by trainer)
- 6C Understanding Traditional Medicine
- 6D Host Country National Health Plan of National Policy of PHC (to be developed by trainer)

Trainer Attachment:
- 6A PHC Worksheet

MATERIALS Newsprint, markers, cardboard, scissors, writing paper, pen.

PROCEDURE

Trainer Note

This session will require considerable preparation. Beforehand, learn as much as you can about the host country's health policy/plan and the organizational structure of the nation's health care delivery system. Also, obtain a chart of the organizational structure of the Ministry of Health and a copy of their health plan. Before this session, make a large version of the charts in Handouts 6A and 6B.

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Step 1
(20 min)

Introduction to the Host Country's Governmental Structure

Display Handout 6A (Organizational Chart of Governmental Structure) and Handout 6B (Organizational Chart of National Health System). Discuss the overall governmental structure identifying the various levels in the health care system and possible linkages that exist between these levels (ministries, departments, etc.).

Ask the group to identify any similarities or differences between the way that their host country's government is organized compared with that of the U.S. (e.g. background of people in charge of the various levels and ministries, how the president is selected, how the agencies ministries differ or overlap in assigned responsibilities).

Trainer Note

During this step and continuing throughout this session a participant should be asked to record the questions to pose to the panel invited to attend Session 7.

Step 2
(20 min)

Introduction to the Host Country's National Health Plan

Distribute Handout 6D (Host Country National Health Plan of National Policy of PHC) and allow about 10 minutes for the group to read through the policy, jotting down questions on particular issues as they read.

Based on their understanding of PHC as defined in Session 5, have participants identify and list the elements of PHC that are addressed in this policy or plan. Have individuals discuss possible reasons for the choices the country made in their PHC policy. Have them add these issues to the list started in Step 1.

Trainer Note

Some of the issues that the participants may raise are the following:

- Cost effectiveness of certain programs such as immunization vs. water and sanitation.
- Amount of health budget spent for preventive vs. curative health care and the cost-effectiveness of each type of care.
- Availability and placement of trained medical personnel (M.D.'s, nurse, midwives).
- Location and distribution of health posts.
- Health services provided.
- Constraints on government officials.
- The role of traditional medicine in the health care structure.
- Utilization, training and payment of village health workers.
- Development of a health data system for PHC.

Step 3
(30 min)

Understanding Traditional Medicine

Distribute Handout 6C (Understanding Traditional Medicine) and allow the group 10 minutes to read this article. Based on this article and any cultural readings they may have been exposed to in the past (e.g., college courses on Africa, CAST or other pre-service training they have completed up to this point) have them identify the places where certain traditional health systems and practices interact with formal medical structures and discuss the possible implications stemming from a duality of systems.

Ask participants to record questions they have regarding the Ministries with which they will be working as well as where and how traditional practices, beliefs and structures are viewed or integrated in the country's policies.

Step 4
(20 min)

The Importance of Collaboration Between and Among National and International Agencies

Using the information and material gathered from talking with different national and international agency representatives, (such as AID, CDC, WHO, UNICEF, CARE, NGO's and PVO's) briefly present a lecture (10 minutes) showing how these international agencies collaborate in the implementation of one PHC activity and where the role of the Volunteer fits into this schema.

Post in front of the group a large version of the chart found in Trainer Attachment 6A (PHC Worksheet). Ask participants to apply the information from this and earlier sessions and use the worksheet to define and clarify the primary health care roles of the provider groups in their particular country and region.

Trainer Note

The relationship between these organizations and the country-specific program usually entails the international organizations providing some of the following resources:

- AID: Technical assistance, equipment, supplies, funding.
- WHO: Technical consultants, funds for training courses and trainers.
- UNICEF: Vaccines, vehicles, cold chain equipment, ORS packets.
- CDC: Technical assistance, trainers, supplemental vaccines, chloroquine.
- Peace Corps: Manpower

Trainer Attachment 6A (PHC Worksheet) lists broad categories of providers in the first column starting with the individual and family and working up to national agencies and ministries other than the Ministry of Health. The next four columns list the functions of PHC delivery, planning, budgeting, scheduling, implementing and evaluating. In the spaces provided, briefly describe the roles of each type of health care provider. For example, under "planning" one might write "identification of needs" for the community.

It is not expected that the participants will be able to complete this worksheet at this time. The worksheet has been provided and should be introduced as a framework from which to structure questions and to identify and compare the roles of persons and organizations involved in the PHC process. The complete worksheet summarizes the pattern of PHC roles for the country. Reading down each column you can compare the roles of each group for planning, budgeting and scheduling, implementing, and evaluating. Reading across, you find a role description for each group in terms of the four areas.

It is anticipated that by the end of their training the participants will be able to complete this worksheet and that it can be used as a post-test instrument as well as a useful reference in their future work.

Step 5 (20 min) **Generating the Final List of Questions to Ask During Session 7**

Drawing on all the discussion about the host country's governmental organization and health policy, the traditional health system, and the function of international agencies, have the group compile a final list of questions to ask the officials who will participate in Session 7.

Trainer Note

Focus the discussion on the role of the PCV in PHC activities as they relate to the MOH and other Ministries and international agencies. Also, address the issue of cooperation and point out that team cooperation depends on each member of the group understanding the:

- Objectives of the Health Plan
- Organizational structure of the government
- Interfacing between traditional structures and beliefs, international organizations and the official government.

Additional questions that may be added at this time to their list of questions are:

- What have been some of the successes and/or failures in various PHC programs?
- How does the role of the PCV fit into the health care system of this country?

Understanding traditional medicine

That august institution the French National Academy of Medicine has sometimes been criticized for conservatism and lack of receptiveness to any trends that do not fall within the strictest confines of scientific and clinical thought. The latest edition of the Academy's *Bulletin*, however, carries an article on traditional medicine by the Dean of the Faculty of Medicine at Abidjan. A discussion of the paper by members of the Academy, moreover, showed complete agreement that traditional medicine is needed in the rural communities of Africa. We are pleased to reproduce this article below.

In pursuing its aims in Africa, the World Health Organization has, over the past decade, been particularly interested in the practice of traditional medicine in rural areas and has organized a number of conferences on this subject, the main ones having been held in Dakar in 1968, Cairo in 1975, and Abidjan in 1979.

The African and Malagasy Council on Higher Education similarly held symposia on traditional medicine and the African pharmacopoeia in Lomé in 1974, Niamey in 1976, Kigali in 1977 and Libreville in 1979.

One has to conclude, therefore, that a clear trend is emerging in favour of gaining a better understanding of traditional African medicine and, hence, a precise evaluation of how it can be applied in the modern world. But, on first consideration, is this not a dangerous venture? Is not the problem being tackled an extremely complex one? What, objectively, can one expect from this sort of medicine in an age when modern medicine has made such great progress in promoting health throughout the world? In order to find rational answers to these questions it is necessary to examine the reasons behind WHO's re-evaluation of traditional medicine, to study the concept of illness in the traditional sub-Saharan African setting and, lastly, to broach the study of this system of medicine and its long-term prospects.

The Reasons for Re-evaluating Traditional Medicine

Despite the endeavours of governments and international organizations, the failure of health services to meet the basic health needs of Third World populations is notorious. These services are accessible to only a small minority (less than 15%) of the rural populations, which are those most vulnerable to illness because of the many different factors operating upon them: a hostile environment, poverty, ignorance of the objective causes of ill-health and of appropriate protective measures, undernourishment, and malnutrition.

Thus, the rural communities, which represent 80% of national African communities, are of paramount concern to governments faced with the responsibility of bringing them primary health care on the spot, protecting them against lethal and dangerously widespread endemic diseases, and providing them with health education. The means to be applied in order to remedy this situation are defined in terms of hospitals, dispensaries, health centres, mobile or fixed medicosocial structures, and the distribution of a sufficient quantity of suitable drugs. In addition, for any health measure to be effective, it must be combined with

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[1] Dean of the Faculty of Medicine, Abidjan, Ivory Coast. The article is reproduced from a paper published in *Bulletin de l'Académie nationale de Médecine*, 164 (5): 428 (1980).

simultaneous action in the following areas: agriculture, housing, urban development, transport and communications, water supplies and, lastly, education. This is a long, exacting, and highly expensive task.

An extremely significant factor in this regard is the cost of health care as a proportion of the gross national product of these countries.

For the sake of comparison, it is useful to note that the annual cost of health care in France is approximately 7% of the gross national product, or about 1 800 francs annually per head, an amount which exceeds the entire gross national product in most of the sub-Saharan African countries (Table 1).

Table 1. *Per capita* gross national product (francs)

France (1974)	25 231
Ivory Coast	1 920
Senegal	1 280
Upper Volta	330
Togo	780

There is also a large disparity in incomes within the countries themselves. In Senegal the average annual income in the rural areas is 680 francs whereas for wage-earners in Dakar it is 10 000 francs.

A further major problem is that of the quantity and quality of the medical and paramedical staff in relation to the existing health situation. The number of qualified medical workers is absurdly low, as shown in Table 2, which gives the numbers of doctors and pharmacists in African countries, most of whom have set up their practices in major towns offering them security, comfort and leisure.

Table 2. Numbers of qualified medical workers

	1975 population in millions	Pharmacists				Physicians
		Total		Dispensaries		
		1970	1975	1965	1975	
Benin	2.7	24	—	13	20	93
Ivory Coast	5	81	103	41	48	356
Guinea	3	8	—	7	—	77
Upper Volta	6	13	16	5	7	58
Mali	3.8	11	18	8	17	121
Mauritania	1	7	—	1	—	68
Niger	3.5	10	—	4	—	69
Senegal	3.9	64	—	42	57	263
Togo	2.1	—	20	14	15	70

It is difficult to argue with J. Flahaut, who wrote: "In these conditions one is led to conclude that Western notions of therapy have nothing to offer when it comes to dealing with the problems of the underprivileged." After conducting a number of surveys in the field, WHO and UNICEF have reached the same conclusion concerning the inadequacies of curative medicine and the costliness and unsuitability of hospital treatment modelled on that of the industrial countries.

> The failure of health services to meet the basic health needs of Third World populations is notorious.

Having thus appraised the situation, WHO is considering a strategy aimed at using Africa's own resources, including the traditional medicine currently practised in rural areas, with its major advantage of low cost, which has already ensured its survival for many generations.

This form of medicine has the further merit of being accepted spontaneously as an integral part of the local culture, and being identified with the emotional content of the illness in indigenous surroundings.

The Concept of Illness in the Traditional sub-Saharan African Setting

This concept constitutes the very foundation of traditional medicine. Illness is regarded as the material sign of a lack of harmony between a human being and his social corpus, between a person and his visible or invisible environment. This sign is itself the expression of a punishment imposed by nature on the individual who transgresses one of the laws of society, of the material or spiritual environment, thereby disturbing the normal balance of natural phenomena.

The illness may, however, be experienced as the result of an attack induced by a sorcerer, a man with occult knowledge able to unleash invisible elements in an assault upon the health of another person. Again, the illness may sometimes be experienced as a message signifying the election of an individual. It then takes the form of a psychiatric syndrome, the genie making mad him whom it has chosen as its spokesman and priest and who refuses to submit to its will. Thus, the illness has no independent existence, being of supernatural origin in the majority of cases.

The healing process is subject to this logic and consequently consists of a number of different stages:

- firstly, the identification of the initial act which disturbed the established order or, in other words, the discovery of the violation of an established law or the evil spell emanating from another person;
- secondly, once the initial act is diagnosed, the spirits' forgiveness must be sought, the hostile force or malevolent sorcerer neutralized, and the damage caused by the initial fault repaired usually through sacrifices (sheep, chicken, eggs). Knowing how to find the offended spirit is not always easy.

Illness is regarded as the material sign of a lack of harmony between a human being and his social corpus.

Once these two hurdles of diagnosis and reparation have been surmounted, the illness is freed of all spiritual connexions and becomes an independent entity on which any medication, traditional or modern, can act. The illness is now a purely somatic one.

The main causes of death in traditional Africa can therefore be summarized under four heads.

(1) Failure to recognize the initial act responsible for the disturbance of the established order. Diviners profess to be able to diagnose the metaphysical source of illnesses and say what kind of therapist (traditional or modern) the patient should go to. They are, in fact, specialists in metaphysical etiology.

(2) Refusal of the initial force to accept any reparation. There exist irreparable offences for which the only penalty is the death of the offender. The expiation of the offence through death is the sole condition required for society's well-being. In cases such as this one often hears the remark made: "This patient is not suffering from a hospital illness", which means that the illness in question cannot be emptied of its metaphysical content and is therefore not amenable to any form of treatment. This explains why relatives do not behave aggressively towards doctors when patients die in hospital, while in Europe lawsuits are commonplace. Why blame the doctor's treatment when the verdict passed by the initial force is irrevocable?

(3) Delay in making the metaphysical diagnosis and effecting the reparation. Such a delay may lead to the illness taking an irreversible course unconnected with its metaphysical origins. It is as though the pathogenic factor carried a metaphysical charge that can be inhibited. If this inhibition does not take place in time, the intrinsic action of the pathogenic factor will be irreversible.

(4) Incompetence of the traditional or modern therapist in face of an independent disease, whether that independence is acquired or natural. It is interesting to note that a certain proportion of patients who come to die in our hospitals will have passed through the hands of practitioners of traditional medicine with some sort of mastery of medicinal plants.

The Practice of Traditional Medicine and its Future

Practitioners of traditional medicine, known in French as *tradipraticiens*, a term given currency by WHO scientists and experts, can be divided into several categories:

- herbalists, who use plants;
- spiritualists, whose use of plants is very limited, their treatment being primarily metaphysical;
- the great spiritualist healers, who never use plants, but only incantations and rites;
- lastly, the diviners, that is to say herbalists who practice divination and are essentially specialists in metaphysical diagnosis.

The testimony of these initiates informs us that the traditional practitioner's knowledge was initially transmitted by a spirit whose mission is to watch over mankind and elect certain individuals as depositories of knowledge and practices enabling them to diagnose, prevent and treat various imbalances, whether physical, mental or social. This revelation is a free gift and explains why the practitioners accept gifts rather than fees, which are forbidden. The gift received is the leitmotiv running through the homage which the practitioner must pay to the Supreme Being who watches over mankind and opens men's eyes to the secrets of nature.

The traditional practitioners who possess this spiritual power of diagnosis and the gift of healing the sick usually keep their knowledge an absolute secret. Some of them go so far as to declare that their knowledge or at least their gift of healing cannot be transmitted. Clearly, by its very nature this practice is liable to be viewed with a degree of scepticism aggravated by the factors that WHO experts have pointed out namely:

— the vagueness of traditional practitioners' diagnoses;

— the laxity of their posology, governed as it is by an empiricism never called in question;

— the undue exploitation of non-material aspects;

— the practice of witchcraft and charlatanism;

— their failure to acknowledge limits to their competence.

On analysis one soon realizes that this type of medicine is particularly complex, placed as it is at a point where a certain medical expertise overlaps with a cosmic phenomenology. Consequently, the study of traditional medicine opens up two different avenues of research. The first, of concern to sociologists and psychiatrists, leads towards an ethnomedicine, that is, a discipline examining the role played by applied ethnology, culture, religion and psychology in all aspects of medicine. The second avenue leads to a more rational study bearing on the African pharmacopoeia.

Our concern as doctors and pharmacists, and no doubt the concern of WHO also, is to carry out studies in areas directly accessible to scientific research, which means in this context the study of medicinal plants in Africa. In fact, stimulated by WHO, the conviction is growing upon African scientists that in virtue of the wealth of non-mysterious information that is directly amenable to research and training, and the mastery of which will in practice lead to the relinquishment of magic, Africans, by concerted action, should be able to bar the way to mystification and help the development of their countries.

> We can be confident that one day there will be a rational convergence between so-called "traditional" and modern medicine.

In this spirit and at the request of the Organization for African Unity, a number of research institutes have been set up to study medicinal plants and the traditional pharmacopoeia. The main ones are at Cairo (Egypt), Dakar (Senegal), Ifé (Nigeria), Kampala (Uganda), Tananarive (Madagascar), Bamako (Mali), and Manpong-Akwapin (Ghana). These institutes have already made some progress, particularly in regard to the inventorying, plant-health control, and utilization of medicinal plants. Work is carried out by multidisciplinary teams bringing together botanists, ethnopharmacognosists, plant chemists, ethnosociologists, phytogeographers, physicians, pharmacists, traditional therapists, agronomists, foresters, and various other specialists such as clinicians, pharmacologists, biologists, geneticists, and biophysicists.

The immediate concern of each of these institutes is to study drugs of priority importance: anticancer, antimalarial, anthelmintic, antibiotic, hypertensive, cardiotonic and antiviral drugs, insecticides, and drugs to combat sickle-cell anaemia, diabetes and skin diseases. In the Ivory Coast a programme to study natural substances used in medicine has been launched with the participation of the Institute of Floristics, the School of Pharmacy (the pharmacodynamics and toxicology unit, pharmaceutical technology and galenic pharmacy unit, ethnobotany unit and pharmacognosy unit), the Faculty of Sciences (extractive chemistry, crystallography, animal physiology, and electron microscopy laboratories), and the Faculty of Medicine (departments of immunohaematology and of physiology and functional examinations).

The School of Pharmacy has chosen two areas for particular study and coordination:

— substances protecting against, or healing, snake bites; and

— substances used in the treatment of sickle-cell anaemia or its symptoms.

It is worth mentioning that species of the following genera of African plants in current use are now included in the pharmacopoeias of the industrial countries: *Strophanthus, Strychnos, Rauwolfia, Cinchona, Centella, Aloe*, etc.

We are therefore justified in saying, in conclusion, that many different avenues of research are now opening up in the field of pharmacology and could lead to the discovery of new natural molecules to supplement those already known to modern medicine for the good of mankind throughout the world.

We can be confident that one day there will be a rational convergence between so-called "traditional" and modern medicine. This is what the future would appear to have in store for us. □

(From: Yangni-Angate, Antoine. Geneva. World Health Forum. 1981. pp. 240-244)

PRIMARY HEALTH CARE WORKSHEET

	PLANNING	BUDGETING AND SCHEDULING	IMPLEMENTING	EVALUATING
Individual and family				
Community				
Health center team				
District health team				
Regional health team				
National health programs				
Ministry of health				
Other sectors				
National agencies and ministries				

(From: MEDEX, District and National Planning and Management Workshops Manual. Honolulu. 1983. p. 124.)

Session 7

THE ROLE OF THE PEACE CORPS VOLUNTEER IN PRIMARY HEALTH CARE

TOTAL TIME		2 hours
OVERVIEW		An awareness of how the Volunteer's duties are interlinked with the host country's overall health plans can help the Volunteer make better choices in carrying out the tasks included in their job assignments. In this session trainers, participants and host country and other agency representatives have an opportunity to clarify their expectations and understanding of their roles. Through short presentations and a panel discussion, the agency representatives present information and answer the questions developed in Session 6 concerning the PCV's role in the host country's efforts to accomplish their health plan.
OBJECTIVES	●	To clarify expectations about the role of the Volunteer in PHC. (Steps 2-4)
	●	To define the organization and priorities of the host country and international agencies. (Step 2)
	●	To determine where PCV duties link with and contribute to their primary health care activities and plans. (Steps 4)
RESOURCES	-	The list of questions generated in Session 6 to address to the panel.
	-	Persons (Volunteers) with strong language capabilities to act as moderators and, if needed, as interpreters.
	-	Representatives of Host Country and International Agencies.
MATERIALS		A comfortable meeting room for the panel discussion, newsprint and markers, any special materials such as audio-visual aids requested by the panelists.

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PROCEDURE

Trainer Note

This session will vary depending on the location of the training center (e.g., capital city vs. rural training site), and the availability of Ministry officials and representatives of international agencies. If the trainees have just arrived in the country and have not been exposed to any cross-cultural or language training, this session should be scheduled for a later date.

Prior to the outset of the actual training course, the trainer or the country staff should contact representatives from several agencies, particularly the Ministry of Health and the Ministries under which the participants will be working, but also including WHO, UNICEF, AID, and CDC. Invite representatives from host organizations (maximum five) to attend this session and lunch or refreshments immediately following. Provide the guests with:

- an agenda for this session (i.e., training objectives, sequence of speakers and topics)
- an overview of the training course goals and objectives
- the projects the participants will be involved in.

Invite the official agency representatives to present a brief talk (5-15 minutes, depending on how many agencies will be represented) concerning the following suggested subjects:

- Official government health policy/plan
- Structure of the government and interrelationships between the various ministries
- The National health care delivery system
- The role of the PCV in the country
- The general role and activities of WHO and country specific WHO activities
- The role of AID in promoting PHC activities, i.e., which ones they have chosen to support and why

Have the representatives arrive in time to look over the list of questions the participants would like them to address. Explain that these issues will be dealt with during the discussion following their presentations.

Continued

If no one in the training group has a command of the language, request a current Volunteer or a bilingual language instructor to act as an interpreter and moderator for this session and to translate the list of questions generated by the group.

Help the moderator prepare for his or her role prior to the session. If primary health care is a sensitive issue in the host country, discuss with the moderator how to manage the open forum such that the climate is appropriate and comfortable for all involved.

Step 1
(15 min)

Introduction of the Agency Representatives

Welcome and introduce each of the representatives. Have the moderator introduce the training group to the panelists, giving a brief profile of the general background of the Volunteers. (This may be done on an individual basis if language proves no barrier and if the group is not too large).

Step 2
(40-50 min)

Prepared Presentation

Ask each representative to give his/her presentations or prepared remarks.

Trainer Note

Ideally begin the presentations with the representative of the MOH followed by representatives of other ministries; WHO, UNICEF, AID, CDC, and so forth.

Be sure that everyone is aware that there will be ample time for questions following all the presentations.

Step 3
(45 min)

Questions and Answers

After the representatives have finished their presentations, ask the moderator to lead an open forum for questions and answers.

Trainer Note

Ask the moderator to:

- Keep the pace moving and guard against any one panelist being called upon too little or too much.
- Encourage discussion among the panelists
- Use the list of questions developed in Session 6 as a basis for the open forum, but also allow follow-up questions as the time permits.
- Intervene if any questions seem misdirected, culturally insensitive, or too political.

Step 4
(20 min)

Closure

Have the moderator close the session by asking the participants and guests to reflect for a moment on the information gained from this session and ask them to work together to develop a list of 3-5 of the most important goals they would want to see the Peace Corps Volunteer accomplish during this two year service. At the end of this, thank the representatives for attending this session and invite them to join the training group for lunch or for refreshments.

Trainer Note

Taking into consideration the cultural norms and the constraints of the training schedule , arrange a lunch, dinner, or at least simple refreshments to follow the panel discussion. If possible, invite the Peace Corps director and assistant to attend. This informal time provides an opportunity for more discussion.

Session 8

FACTORS AFFECTING HEALTH

TOTAL TIME 2 hours

OVERVIEW Primary health care is the philosophical framework for most community-based programs. An important aspect of the primary health care perspective is the view that health includes mental, social and physical well-being. In this session, participants examine the concept of health and its interrelationship with the cultural, political, social and economic systems in their host country. Participants identify factors that affect personal, family and community health, including beliefs, practices and socio-economic conditions. This session provides essential background for the development of categories of information for learning about the community.

OBJECTIVES

- To share concepts of health defined in terms of psychological, social, and physical well-being. (Steps 1, 2)
- To define what health means for the individual, the family and the community. (Steps 3, 4)
- To identify beliefs, practices and socio-economic conditions which affect individual, family and community health. (Steps 3, 4)
- To examine factors influencing the utilization of health services. (Steps 4-7)

RESOURCES

- Role of the Volunteer in Development (Peace Corps)
- Helping Health Workers Learn (Chapter 26)
- Community, Culture and Care (Chapters 10 and 12)

Trainer Attachments:
- 8A Story of Ibrahim
- 8B "But Why"
- 8C Chain of Causes
- 8D Role Play

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MATERIALS Cardboard, colored pens, flannel gram, newsprint, pins, scissors and markers.

PROCEDURE

Trainer Note

Prior to beginning this session prepare the cardboard links and symbols as described in Trainer Attachment 8C (Chain of Causes). Also ask five participants to prepare the role play in Step 5 a day before the session occurs. Provide these participants with role descriptions from Trainer Attachment 8D.

This session should be coordinated with the participants' Cross-Cultural and the Role of the Volunteer in Development Training.

Step 1 (15 min) **Defining Well-Being**

Ask the participants to write on a small strip of paper a definition of what "well-being" means to them. Give them five minutes to consider the question and to write short one word or phrase definitions on paper and put them into a bowl. While they are writing, post in front of the room newsprint prepared with the categories mentioned below in the Trainer Note. Then, ask for volunteers to select four papers each from the bowl, read the definitions, and place them on the newsprint under the most appropriate category.

Trainer Note

To facilitate participants understanding of what concepts lie behind their definitions of well-being, prepare a chart by drawing and labelling three columns on a sheet of newsprint as shown below:

BIOLOGICAL/PHYSICAL	MENTAL	SOCIAL
		Cultural: (attitudes, customs, beliefs) Economic: (money, land resources, housing) Political: (who controls what and how)

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Step 2
(15 min)

Defining Health

Ask participants to briefly discuss the collective definitions in light of the way they break down into the three categories (biological/physical, mental and social) and how these definitions relate to the concept of health. Have the group use their definition of well-being to help them come up with a definition of health. Write this definition on newsprint and beside it post the WHO definition (See Trainer Note). Have the group compare the two definitions and reach a conclusion on what health means to them in the context of the here-and-now.

Trainer Note

The World Health Organization defines health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity."

Step 3
(10 min)

Story of Ibrahim - Individual Family, and Community Health

Ask everyone to listen carefully as you read Trainer Attachment 8A (Story of Ibrahim) and to note all the factors that may have contributed to his health status and that of his family and community.

Trainer Note

The Story of Ibrahim should be adapted to local cultural, social and medical conditions. You may want to use a story that takes place in your own area; just be sure that the narrative includes several factors that affect individual, family, and community health.

Step 4
(20 min)

Playing the "But Why" Game

To help participants analyze the story in terms of what caused Ibrahim's death, ask them to play the "But Why" game as described in Trainer Attachment 8B. As they move through the "But Why" questions and begin identifying all the different factors which led to the story's outcome, have them form a Chain of Causes as described in Trainer Attachment 8C. Each time the group states a cause for the health outcome, have one person pin or stick the appropriate link on the flannel board next to the corresponding symbol for the individual, family or community.

Wind up the processing of the story by asking the group the following questions:

- Why then did Ibrahim die?
- Why is it useful to consider in such depth the cause of health outcomes? Why is it particularly important for PCV's?
- Where along the Chain of Causes can a PCV be most helpful? Harmful?
- How effective were the game and flannel exercise as learning techniques for analyzing the story? Could they be used by health workers in the field?

Step 5
(10 min)

Preparing for Role Play on the Utilization of Health Services

Give the preselected role players 10 minutes to finalize their preparations for the role play. While they are preparing, discuss with the rest of the group their role as observers.

Explain to participants that they will now be involved in a role play (lasting no longer than 20 minutes) that will examine factors that affect the utilization of health services and the PCV's role as one of several health care providers. Set the stage for the role play by describing the scenario from Trainer Attachment 8D.

Trainer Note

Ask experienced volunteers or language trainers to act as advisors to the persons preparing these roles. The role play activity should enable the observers as well as the role players to identify what they know about bio-medical and traditional views concerning:

- role of the sick and attitudes about being sick
- role of the health practitioner
- relationship between practitioner and patient
- problems in relationship between the two systems
- possible ways the PCV's can work constructively within and between both systems

Advise the observers to keep these issues in mind during the role play and to be prepared to summarize what they observe in terms of these issues. You may want to summarize these points on newsprint for reference during the discussion of the role play.

Be sure the workers playing the Doctor, Traditional Healer, and PCV understand that their task is to convince the mother that the approach/system that they represent is best for her and her baby.

Step 6 (20 min) **Acting Out the Role Play**

Have the players act out the role play.

Step 7 (20 min) **Problems in the Relationships Among Health Systems**

First debrief the role players by asking them how they felt about their roles as well as the other characters in the role play. Then, based on the role play, the story of Ibrahim and personal experiences the participants have had, ask the group to draw some conclusions about the problems which exist among traditional and modern health systems and personal health beliefs. Facilitate this brief discussion around the following questions:

- What are local attitudes about sickness and their susceptibility to illness in this culture? (For example, if you were someday to get very seriously sick, what do you think it would be? What else?).
- What seems to be the major problems between seeking either traditional or modern health care?

- What barriers do you see affecting utilization of health services?
- What might be the potential role or responsibility of a traditional healer, doctor or nurse and the PCV?

Step 8 (10 min) **Applying Their Knowledge to Their Future Role**

Ask the participants to brainstorm a list of activities they can do to find out what factors affect the health and utilization of health services in a community.

Trainer Note

This discussion should be focused on what volunteers can do in their community to understand and identify the reasons for and barriers to utilization of health services. This can be done by:

- Talking with various practitioners and health care directors about the types of clients they serve, where they come from, and what their backgrounds are.
- Observing where people go when they are ill.
- Examining patient records.
- Talking informally with patients and community members on how they define health, what they do when they are ill, what methods and treatment they prefer and why.
- Inquiring about their attitudes toward immunizations and other preventive health measures.
- Noticing any signs of traditional preventive measures, household "fetishes," amulet and charms worn as possible protection against disease.

THE STORY OF IBRAHIM

Consider Ibrahim, a 2 1/2-year-old boy who died of measles. Ibrahim lived with his family in the small village of Sagata, 11 km. by dirt road from the town of Kebemer. In Kebemer there is a health center staffed by a doctor and several nurses. The health center conducts an immunization program and has a Land Rover. But the immunization program only occasionally reaches nearby villages. One year the health team began to vaccinate in Sagata, but after giving the first vaccination of the series, they never returned. Perhaps they grew discouraged because many parents and children refused to cooperate. Also, the road to Sagata is very dusty and hot and during the rainy season is often washed out.

When the staff of the health center failed to return to Sagata, a health worker from the village went to Kebemer and offered to take the vaccine to the village and complete the vaccination series. He explained that he knew how to inject. But the doctor said no. He said that unless the vaccines were given by persons with formal training, it would be putting children's lives in danger.

Two years later, the boy Ibrahim became ill after returning from a long visit with relatives in M'Bake. Ibrahim had diarrhea and had lost a lot of weight in the past year. Ibrahim's father and relatives were peanut farmers whose crops were destroyed because of the drought. Food was scarce and very expensive and his family was too poor to buy much more than an occasional dried piece of fish and some rice. So Ibrahim went hungry and was becoming increasingly malnourished.

Ten days after his return to Sagata, Ibrahim had a fever. Within 24 hours he had a runny nose, cough, and his eyes were very red. On the fourth day after the onset of fever, his parents noticed a bumpy purple colored rash.

The village health worker at first called his illness Smallpox and suggested that Ibrahim's parents take him to the health center in Kebemer.

The family paid one of the taxi drivers who was vaccinated against smallpox to drive to Kebemer in his taxi. They had managed to borrow 500 Francs, but the driver charged them 300 for the trip. This was much higher than the usual price.

In Kebemer, the family waited for 2 hours in the waiting room of the health center. When it was finally their turn to see the doctor, he at once diagnosed the illness as measles. He explained that Ibrahim was dehydrated and needed to be treated with intravenous fluids for the diarrhea and malnourishment which were complicating his disease. He said that they would need to take Ibrahim to the capital city of Dakar, 200 km. away to be hospitalized.

The parents despaired. They had barely enough money left to pay the taxi fare to Dakar. If their son died, how would they get his body back to the family graveyard in Sagata.

So they thanked the doctor, paid his modest fee, and took the afternoon transport back to Sagata. Two weeks later, Ibrahim died.

(Adapted From: Werner and Bower. Helping Health Workers Learn. Chapter 26.)

BUT WHY ...?

To help the group recognize the complex chain of causes that led to the health outcome of Ibrahim and that affected the health of the community and his family, play the game "But Why ....?" Everyone tries to point out the different causes. Each time an answer is given, ask the question "But Why....?" This way, everyone keeps looking for still other causes. If the group examines only one area of causes, the discussion leader may need to go back to earlier questions, and rephrase them so that the group explores in new directions.

From the Story of Ibrahim, the "But Why....?" question game might develop like this:

Q: What caused Ibrahim's illness?

A: Measles - the measles virus.

Q: But why did the measles virus attack Ibrahim and not someone else in his village?

A: Because he was exposed to the virus when visiting his relatives.

Q: But why did he get so sick?

A: Because he had diarrhea and was malnourished.

Q: But why was he malnourished?

A: Because there has been a bad drought and his father and relatives had no yield from their peanut crop to sell to pay for scarce and expensive food.

Q: Let us go back for a minute. What is another reason why the measles virus attacked Ibrahim and not someone else?

A: Because he was not vaccinated.

Q: But why was he not vaccinated?

A: Because his village was not well covered by the immunization team from the larger town.

Q: But why was the village not covered?

A: Because the villagers did not cooperate enough with the team when it came.

Q: But why did Ibrahim's parents not take him to Dakar?

A: They did not have enough money.

Q: Why not?

A: Because the taxi brousse driver charged them so much to drive them to Kebemer.

Q: Why did he do that?

A: A whole discussion can follow.

A: Because the driver needed the money to feed his children or buy his wives expensive material to make dresses for Ramdan.

Q: Buy why didn't they use the money to take Ibrahim to Dakar instead of back to Sagata, their village, where he would die for sure?

A: Because they didn't believe the medicine would really save Ibrahim or they were convinced it was Allah's will that Ibrahim should die. (A whole discussion based on perceived susceptibility and benefits of treating illness can develop.)

Q: But not all the children who get measles die. Why did Ibrahim die while others live?

A: Perhaps it was Allah's will.

Q: Buy why Ibrahim?

A: Because he had complications from diarrhea and poor nutrition.

Q: Why else?

A: Because the doctor in Kebemer could not treat him. He wanted to send Ibrahim to Dakar for treatment.

Q: But why?

A: Because he did not have the right medicine.

Q: Why not?

A: Because he did not receive ORS packets which he ordered two months ago and because I.V.'s are only done in the Capital City.

Q: But why?

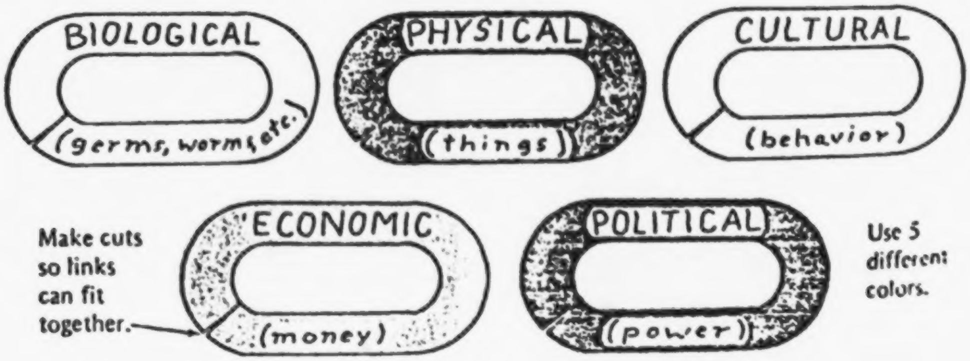
A: A whole discussion can follow. This can pertain to poor planning at the local or national level for ordering and distribution of vaccine from the international drug companies or the cost of supplies, and the inability to maintain the cold chain.

(Adapted From: Werner and Bower. Helping Health Workers Learn. Chapter 26)

The Chain of Causes

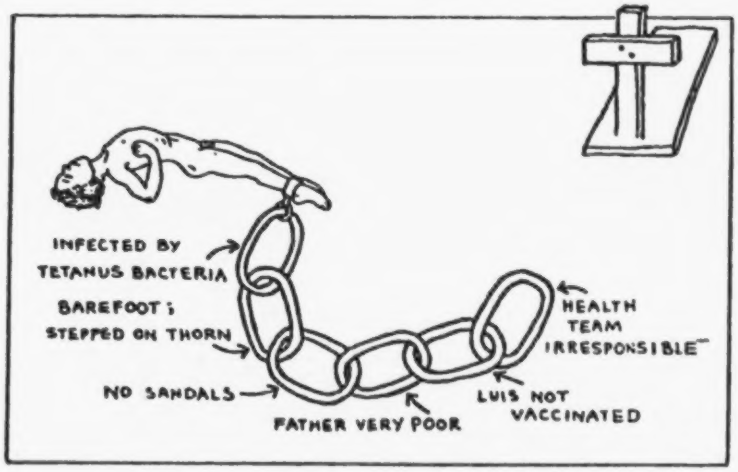
To help the participants get a better idea of the chain or network of causes leading to a certain health outcome and actual chain can be formed. Each time another cause is mentioned, a new link is added to the chain. Give each participant a few links then each time a new cause is mentioned everyone considers whether it is biological, physical, cultural, economic or political. Whoever has the right link for a particular cause adds that link to the chain.

The chains can be made from cardboard and each link can be colored differently to represent 5 kinds of causes. Symbol of Ibrahim, the family, and the community should be made in such a way that they reflect the cultural understanding of the society and the same goes for the symbol used for the grave.

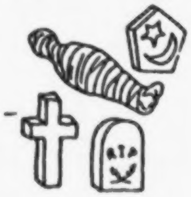

BIOLOGICAL
(germs, worms, etc.)
PHYSICAL
(things)
CULTURAL
(behavior)
ECONOMIC
(money)
POLITICAL
(power)

Make cuts so links can fit together.

Use 5 different colors.


INFECTED BY TETANUS BACTERIA
BAREFOOT; STEPPED ON THORN
NO SANDALS
FATHER VERY POOR
LUIS NOT VACCINATED
HEALTH TEAM IRRESPONSIBLE

Be sure to use the symbol for the grave or death that is understood in your area.



(Adapted From: Werner and Bower. Helping Health Workers Learn. Chapter 26.)

ROLES AND SETTING FOR ROLE PLAY ON TRADITIONAL AND MODERN HEALTH SYSTEMS

ROLES

Doctor

Your orientation is a Western bio-medical view of health care. You diagnose patients for physical problems and treat the problems. You maintain an objective and distant relationship with your patients, with no involvement in their personal lives. Your view is that you are the authority on who is sick and who is not. Illness to you is explainable in terms of biology. You provide the most modern treatment available. You give anti-malaria pills to children with fevers. You distrust traditional health practitioners and feel they should not be treating dehydration cases. You spend as little time as possible with your clients as you have many people to see. You feel that traditional healers should be prevented from practicing because they do more harm than good.

Traditional Healer

Your orientation is traditional medicine. You are part of the community of people who you serve. You feel that health and illness are caused by social and spiritual forces as well as physical conditions. You recognize that there are some kinds of illnesses that you cannot treat and you send them to the clinic, somewhat reluctantly, because people in the clinic treat you and your clients disrespectfully. You have a great deal of knowledge of local herbs, treatments for illness including malaria. Your treatment for malaria is a herbal drink. You are a friend to your clients as well as a neighbor. You are always available to help them as long as they want. You are highly respected in the community.

Mother

You have a very sick child. The child has a fever for several days and is very sick. It is not passing urine, has no tears and is very hot. You have been withholding liquids and foods so it could get rid of the fever. The doctor is visiting the community to see who has health problems; the traditional healer is in the community as is the Peace Corps Volunteer. You must decide what type of health care to use to make your child well, or decide that there is no hope for your child to survive.

Peace Corps Volunteer

You have recently arrived in the community. You have just completed a Peace Corps training on malaria and you are eager to share what you have learned with the community because you know that malaria is a serious problem there. You know both the doctor who visits the village monthly and the traditional healer who lives in the village. You are concerned about the differences in their perspectives about health since you have to work with both of them. You are looking for ways to resolve some of these differences without making either or both angry with you. You see the fever as a situation where you may make some progress in resolving differences.

Setting

Mrs. X is sitting in the village by the well complaining about the terrible state of her child (who is on her back). Other women are consoling her about the probable death of the child. The doctor arrives for his monthly visit to the village. The traditional healer arrives to get water at the well and hears the woman complaining. The PCV also arrives to get water and hears the woman complaining. The doctor, the healer and the PCV each offer advice to the woman, trying to persuade her that their approach to health care is the one she should follow. The woman will decide which, if any, person's advice she will follow.

Session 9

MONITORING

TOTAL TIME 2 1/2 hours

OVERVIEW The success of a health program depends on many things, not the least of which relate to the design of assessment mechanisms and their use in management and decision-making. Experience has shown that continuous and timely monitoring is essential to health programs.

In this session participants examine the tasks involved in monitoring. They develop checklists for items to monitor in their assigned program and when these should be monitored. They also use a problem-solving model to resolve any problems that are identified.

OBJECTIVES

- To differentiate monitoring from evaluation. (Step 1)
- To describe the tasks involved in monitoring (Steps 2-4)
- To develop a checklist for monitoring a health program. (Steps 4, 5)
- To resolve problem situations that are identified through monitoring. (Steps 6, 7)

RESOURCES

Handout:
- 16C OFPISA Problem Solving Model (from Session 16)

Trainer Attachments:
- 9A Sample Checklist for Monitoring Home Visits
- 9B Problem Situations

MATERIALS Newsprint, markers, monitoring forms used in the Host Country.

PROCEDURE

Trainer Note

Prior to this session you need to familiarize yourself with the participants' specific work assignments (e.g., member of a health education team, clinic supervisor, etc.) and formulate examples of items to monitor based on their specific program objectives. You should also obtain any forms and information on monitoring methods that are used in the Host Country.

Step 1
(15 min)

Distinguishing Monitoring From Evaluation

Ask the participants to define monitoring and evaluation and to state why and when these two processes should be done (see trainer note below).

Tell the participants that for the rest of this session they will be examining the general tasks involved in monitoring. These tasks, which you should list on the board, are:

- Determining what to monitor
- Determining how and when to monitor
- Developing checklists for monitoring
- Solving problems identified through monitoring and
- Always providing feedback to health workers after monitoring.

Trainer Note

The definition of monitoring that the participants establish should include the notion of routine checking of work or performance which occurs within the context of a program or project implementation and which has as its aim the provision of information on progress. Evaluation of an activity or performance implies comparing actual work or usage of service to what was expected to be achieved.

The participants should understand that routine monitoring and evaluation are two of the most important tasks to be done. The following points should be made during the discussion of why and when monitoring and evaluation are done:

- To determine why usage of a service, or the quality of health personnel performance or health of a person is up or down.
- To identify why targets/goals/objectives were or were not met.
- Both processes should be done at regular intervals.

Conclude this step by informing the group that evaluation will be discussed in further detail in Session 21 (Planning and Evaluating a Health Education Project). The remainder of this session will focus on monitoring processes.

Step 2 (20 min) Determining What to Monitor

Tell the participants that the first steps in determining what to monitor consists of identifying the objectives for their project and planning the activities that they will do to achieve their objectives. Write on newsprint examples of objectives and activities that relate to the participants' assiged program. Ask them to brainstorm a list of indicators that they could use to monitor their program/project.

Trainer Note

Prior to this step you should write out four to five program/project objectives and list related activities for each one. Explain to the group that indicators are forms of measurement which include a standard or reference point against which the collected information can be measured and analyzed.

Continued

You might find it useful to draw the following chart on newsprint and list a few examples of items to monitor for each program/ project objective. This should assist the participants in their development of a list of indicators.

Program/Project Objective	Activity	Indicator (Item to Monitor)
To reduce the morbidity and mortality due to immunizable diseases by 20% in Region A.	Inform the public on the dates and times of the immunization sessions	Number of children attending clinics. Number of children completely vaccinated. Number of children incompletely immunized.
To identify all children "at risk" of developing malnutrition in Region B.	Weight Height arm circumference	The child's growth curve. arm circumference for height. weight for height weight for age
To prevent dehydration in all children with diarrhea in Region C.	To train mothers to properly mix sugar/salt solution or ORS packets.	Signs of dehydration observed in children with diarrhea. Proportion of children being given Oral Rehydration solution at first sign of diarrhea.

After participants have finished filling in the indicators, draw two more columns on the chart and label them "Methods for Monitoring" and "When to Monitor". These columns will be filled in during the next step.

Step 3
(10 min)

How and When to Monitor

Using the list of indicators developed in the previous step ask participants to state different methods they could use to monitor their projects/ programs and to write them next to the indicator column on the posted chart. They should also indicate how often the monitoring process should be done.

Trainer Note

There are several monitoring methods and techniques from which to choose. You should obtain information and forms on what, if any, methods are used in the participants' health program.

Present these country/program specific methods during this step. Also, the monitoring methods described below should be mentioned by you if the participants do not include them in their list:

- Observe health workers/mothers
- Talk/interview with health workers/Mothers
- Review records
- Talk with mothers at time of treatment and/or health education session
- Make home visits.

Practice in the use of some of these information gathering methods is provided in Session 11 entitled Methods for Learning about the Community.

In deciding when or how often to monitor, you should consider the following questions:

- How critical is it that work be done correctly?
- Is this an item that is often done incorrectly?
- What monitoring method will be used?
- How many items will be monitored?
- What time constraints exist, if any?
- What is the likelihood that the item may change from satisfactory to unsatisfactory over a period of time?

Step 4
(20 min)

Develop A Checklist for Monitoring

Introduce this step by telling the participants that one simple way to ensure that they are actually monitoring what they planned to monitor is by developing a checklist of what to look for when you monitor. Tell them that, in general, checklists should be:

- brief (that is, include only those items you consider very important to monitor),
- easy to use (that is, designed so you can record your assessments of each item quickly and efficiently), and

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- Include a section at the end where you can make written comments, particularly of any other problems identified and recommendations.

Have the participants form small working groups and tell them their task is to develop a sample checklist of things to remember to ask, observe and record during a home visit or during a health education session. Tell them they should select one example of an item to monitor from the chart they have been developing and to develop their checklist for that indicator.

Trainer Note

A sample checklist for a home visit monitoring diarrhea and dehydration is provided in Trainer Attachment 9A. You may want to present this form if the participants appear to be having difficulty. Remind the participants to recall the discussions on what, how and when to monitor when developing their checklist. Ask them to write their form on newsprint and to select one person to present in each group.

Step 5 (15 min) **Sharing Plans for A Monitoring System**

Reconvene the group. Ask each group to post their newsprint and have them briefly explain their monitoring plan. Hold group discussion on the plans until all have presented, then briefly review and compare them.

Step 6 (25 min) **Problem Situation Assignment and Resolution**

Introduce this step by telling the participants that a normal outcome of monitoring is the identification of problems which need attention. Part of the monitoring process includes stating the problem and identifing and implementing a reasonable solution. The purpose of this step is to provide them with a technique for doing this.

Distribute Handout 16C (OFPISA Problem-Solving Model) to the group. If they have not used it before, explain it to them.

Ask participants to reform the small groups from Step 4 and assign each group a problem situation from Trainers Attachment 9B. Try to make the problem appropriate to the focus of their monitoring system.

Tell them they have 20 minutes to decide on a course of action for the problem. Have each group name a spokesperson to report back on their solution.

Trainer Note

The problem solving model they will use in this step is found in Session 16. If this session precedes Session 16, you should introduce this model as explained in Step 6 of Session 16 and work through one example of a problem with the group prior to having them work on their own. This step will consequently take more time if the participants are unfamiliar with the model.

Step 7
(20 min)

Problem Solution Sharing

Reconvene the group and have each small group report back on their problem solution.

After each presentation, discuss the suggested solutions and have the participants offer alternative courses of action which could be taken.

Step 8
(10 min)

Summary Discussion

Conclude this session by asking the participants to state how monitoring can be a useful tool in their work. What steps they would take in developing such a system, and how they would use the information they collected to improve their program.

Trainer Note

The participants should understand by the end of this session that information obtained from monitoring has several uses:

- to assist decision making, especially in the short-term, for increased project effectiveness.
- to ensure accountability to all levels within the project hierarchy.
- to enable judgements to be made on personal and institutional performances.
- to provide objective means of gathering information that can be used to inform a health worker or others involved in the program, of work that is being done well and should continue, as well as ways to improve their work. In other words as a means for providing useful "feedback".

Session 9, Trainer Attachment 9A

Name of Health Worker ______________________ Date ______/___/____
month day year

CHECKLIST FOR MONITORING WORK PERFORMANCE
DIARRHOEA TREATMENT SERVICE

	Patient 1		Patient 2	
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
ACTIVITIES OF HEALTH WORKER:				
Assessment of dehydration	☐	☐	☐	☐
Preparation of ORS	☐	☐	☐	☐
Provision of treatment	☐	☐	☐	☐
Instructions to mothers	☐	☐	☐	☐
Recording of treatment on patient records	☐	☐	☐	☐
MOTHERS UNDERSTANDING OF:				
Signs and symptoms of dehydration	☐	☐	☐	☐
Prevention of dehydration at home	☐	☐	☐	☐
How to prepare and give ORS	☐	☐	☐	☐
Feeding during and after diarrhoea	☐	☐	☐	☐

LOGISTICS	Satisfactory	Unsatisfactory
Availability of stocks of ORS	☐	☐

Description of problems identified, if any ______________________________

Comments (for example, work done especially well; possible reasons for unsatisfactory responses; changes in performance since last time monitored) ______________________________

Recommendations: ______________________________

Signature of Supervisor ______________________________

(From: WHO Supervisory Skills "Monitoring Performance". p. 17)

PROBLEM SITUATIONS

1. You have found through monitoring clinic utilization that mothers are not using services because there are only male health workers and in their culture there are taboos about seeking treatment for themselves and their children.

2. As you have become acquainted with your region you have learned that the only health facility with ORS packets cannot be reached easily by public transport.

3. You have learned from your home visits that the health workers assigned to teach ORT at the Nutrition Rehabilitation Center are disliked by the community (district and tribal conflicts are involved.)

4. From your routine information system you have observed trends that suggest that overall demand for baby weighing services is much more than the Ministry expected or planned for.

5. From the sentinel surveillance records and hospital records matching and cross-checking you have done, you are learning that health workers have been diagnosing patients incorrectly and are not doing village follow-up. This situation has resulted in outbreaks of yellow fever.

6. A decrease in the number of children completing their DPT vaccination series has been observed. In tracing the cause of the decrease, you have noted that two children from influential families had high fevers with convulsions following their injections. This bad experience has resulted in a loss of faith and interest in the vaccination program.

Add some culturally appropriate problems.

Module 3

Community Analysis and Organization

Behavioral Objectives

By the end of the training, participants will be able to:

1. Plan and implement a local community investigation and analysis that includes:
   - gathering information on at least two subsystems of the community using the KEEPHRAH Model as a basis
   - use of at least three information-gathering techniques identified and practiced during Sessions 10 and 11
   - group discussion of the relationship between the health subsystem and the other subsystems of the community.

2. In a simulated problematic community situation, correctly apply at least three techniques to motivate community participation as described in Session 14.

3. Identify five functions of a community health committee and describe a three-step process for establishing the committee and defining the roles of its members. The information should agree with country-specific data and group conclusions drawn during Session 15.

4. Identify potential job-related and interpersonal problems associated with working as a counterpart, and develop a solution to at least one of those problems using a problem solving model.

5. Plan and implement a Health Day with a series of events that educate local people about health. The events will incorporate a variety of educational and promotional methods and materials and demonstrate technical competency in primary health care activities to the satisfaction of the trainer.

Session 10

DECIDING WHAT TO LEARN ABOUT THE COMMUNITY

TOTAL TIME 2 hours

OVERVIEW The success of a Volunteer's efforts depends on close collaboration with the community members in identifying needs, and implementing and evaluating projects. To establish such a collaboration, the Volunteer needs to have a respect for and understanding of knowledge, practices, beliefs and conditions of members of his or her community. In this session participants identify types of information they need to learn about the community and list methods of gathering that information using the KEEPRAH model of community analysis. Sessions 10 through 13 are a sequence of activities designed to give pre-service trainees experience in gathering and analyzing information about their communities. If at all possible, this sequence should be coordinated with cross-cultural and language training components.

OBJECTIVES

- To define the term "community".
  (Steps 1-4)
- To identify major areas of information that health workers need to learn about the communities in which they will work.
  (Steps 4-6)
- To list at least three techniques for gathering information in the community.
  (Steps 5-6)
- To make a plan for investigating at least two subsystems in the local community.
  (Steps 5-6)

RESOURCES

- Community Culture and Care, Chapters 1 and 2
- Bridging the Gap, pp. 34-35
- Helping Health Workers Learn, Chapter 6
- "Working With the Community" (CDC/CCCD Module)

Handouts:

- 10A The Keeprah Holistic Model
- 10B A Community Diagnosis: What You Might Learn About Your Community

MATERIALS Newsprint, markers, notepaper, colored pens.

PROCEDURE

Step 1
(15 min)

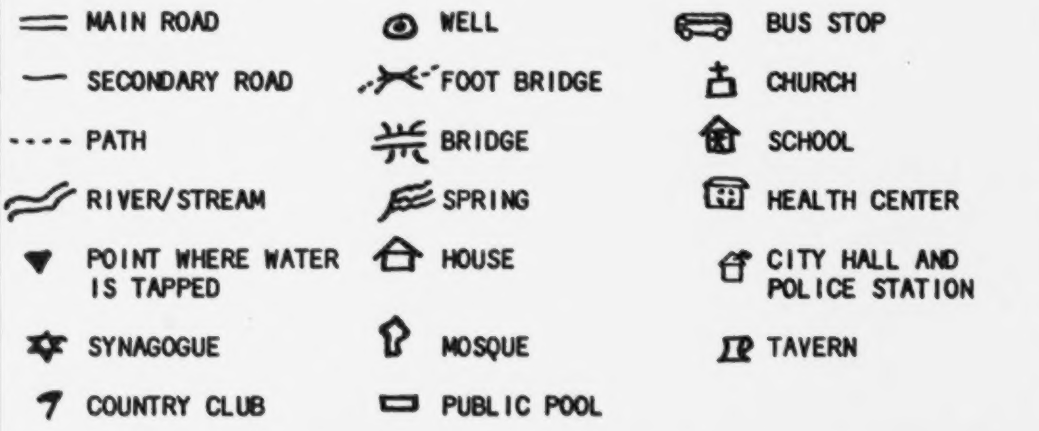
What Is a Community?

Open the session by giving the group a brief overview of the series of activities they will be involved in during Sessions 10,11,12 and 13.

Ask the group to imagine for a few minutes that they are in their hometowns and neighborhoods in the States and have a friend who has recently moved there from another state or country. As a favor, they are going to take their friend on a tour of the area where they live, showing points of interest, describing important community events or issues, and introducing community members the friend should know. Have participants sketch on paper a map of the tour around the town using symbols to depict the various places, people, and things they will show to the recently arrived friend.

Trainer Note

In drawing their tour map, participants may find it easier and fun to use the symbols below as a way to illustrate the details of the tour or route.


MAIN ROAD
SECONDARY ROAD
PATH
RIVER/STREAM
POINT WHERE WATER IS TAPPED
SYNAGOGUE
COUNTRY CLUB
WELL
FOOT BRIDGE
BRIDGE
SPRING
HOUSE
MOSQUE
PUBLIC POOL
BUS STOP
CHURCH
SCHOOL
HEALTH CENTER
CITY HALL AND POLICE STATION
TAVERN

Whatever approach participants take, remind them that they have only a few minutes and they need not worry too much about the artistic appeal of their map but rather show as much information as possible.

Step 2
(15 min)

Walking Through Two Communities

Have the large group split into pairs and act out the dialogue that they have imagined in the previous step, using the map to illustrate where they start out, where they are going, and relevant comments about the various places they are visiting and travelling through.

Trainer Note

Each participant takes a turn being both the hometown resident and the newly-arrived friend. Encourage the pairs to ask questions about what they are and are not seeing and the people whom they hope to or actually do meet along the way. Have them also discuss any preconceived ideas or preformulated opinions they might have had about the particular geographic area and the people living there.

Please note that an indirect outcome of this step is that the participants learn valuable background information about each other.

As in the previous step, time is limited and pairs should take care to exchange roles after 7 or 8 minutes.

Step 3
(20 min)

What and How to Learn About the Community

Reconvene the large group and ask two pairs of volunteers to briefly present one of their community tours, summarizing all relevant information gathered during the dialogue between partners. (Preferably have examples of a rural and urban area).

Afterwards, ask the group to analyze the information-gathering experience by discussing the following questions:

- How similar or different were your approaches in what you decided to show about your community and what you wanted to see in your partner's community?
- What was similar and different about the people, places and things among the communities?
- What did the friends need to see and know that you didn't think of showing?
- What was particularly memorable or impressive about what was shown and talked about?
- Were there any striking patterns in the physical layout of the community (e.g., separation of rich areas and poor areas, racial or ethnic divisions)?
- What did you learn about how people interact in the community? How decisions are made?
- What did you learn about the needs of the community with regards to health, education, employment, recreation, and family relations?
- Did your friend seem to have any stereotype images of you or your community?

Step 4
(20 min)

The KEEPRAH Model of Community Analysis

Ask the group to consider all the discussion so far in the session, and as a group, define "community". Write their definition on newsprint and beside it, have them generate a list of parts or sub-systems which make up a community.

Distribute Handouts 10A (the KEEPRAH Holistic Model) and Handout 10B (A Community Diagnosis: What you Might Learn About the Community) and give the group a few minutes to look them over. Ask for clarifications on every aspect of the information.

Discuss the model and its application to volunteer work by posing the following questions:

- How similar are the subsystems in the KEEPRAH model to those listed by the group?
- Are there any subsystems or aspects of the community which have been left out of the model and/or our list?
- How easy/difficult is it to find out what the resources, problems, patterns, and leadership are for a given subsystem (e.g., for education).
- How does the cross-cultural nature of our work affect our ability to identify resources, problems, etc?
- How do the subsystems interrelate and affect one another?
- How does the relationship among subsystems affect the health volunteer's work in his/her village?
- What are some factors to consider in relation to the felt needs of an individual community member?
- How can we find and verify people's perceived needs?
- What are some ways we can gather the information on the systems and elements presented in the model?

Trainer Note

Be careful not to let the group get "bogged down" in defining "community". The idea is to have a simple framework, i.e., definition and list of parts or subsystems with which to work.

The KEEPRAH Model is a widely accepted model for community analysis. It is particularly appropriate here as an introduction to general information-gathering in the community.

Step 5
(25 min)

Preparing for the Community Investigation

Explain to the participants that the next step in preparing for a community investigation is to plan out what information to gather and how to go about collecting it. Ask them to break down into work teams of three and mention that the triads will be together through the next day and a half.

Explain that each team will spend the following day in the local community investigating the subsystem health, as well as one or two other subsystems from the KEEPRAH model. Ask participants to select the subsystems they would like to investigate or assign them if the time is limited.

Have the teams work through the following task:

1. Decide and write on newsprint what you want to learn about your subsystems. Focus at least some of your investigation toward gathering information that will help you answer these two questions for your group during Session 13.
    - What is the relationship between the non-health subsystem you selected and the health subsystem of this community? (For example: what is the relationship between the education subsystem and the health subsystem?)
    - What do community members perceive as their primary development problems regarding health and the other subsystem you investigated.
2. List ways in which you plan to gather the information (how and where).
3. Select a reporter to inform the large group briefly of your plan during the next step.

Trainer Note

Try to have all the subsystems covered among the various work teams so that at least some information is gathered on each segment of the local community.

If the group is large, break it down into two core groups for the report-back in Step 6.

The rationale for work groups of three is to have participants rotating in the roles of interviewer, listener, and observer during their visit to the community. This is explained to the group during Session 12.

If there is a map of the local community, you might want to introduce it at this time. Have at least the following places identified.

schools
market places
town hall
health center
housing units
store
post office
bar
temples/churches/mosques

If possible, make available small copies of this map to each work team.

Step 6 (20 min) Reviewing the Community Investigation Plans

Reconvene the large group and ask each reporter to present the plans for the work teams. Post the newsprint plans around the room for easy reference. As each plan is presented, ask the others in the group to provide pertinent feedback and suggestions.

Explain to the group that the major focus in this session has been on what information will be collected. During the next session, they will look more closely at how to gather the data and effectively interact in the community.

THE KEEPRAH HOLISTIC MODEL

The community analysis model which you will be working with assumes that you can break down a community, for purposes of analysis, into a series of segments, or subsystems.

Each segment, in the real world, interacts with the other to produce a continual movement and balance which keeps the community alive and moving. Change in one segment can affect another and vice versa. Intervention will do the same. For example, if you introduce improved pig-raising practices by penning up pigs and feeding them, rather than letting them forage for food (an economic intervention), you affect the community health be reducing pig-carried diseases.

Cutting across all segments of the community, you will find that there are common elements. These common elements are defined as:

A. Resources (human, natural and man-made)

B. Problems. Problems are defined as the gap between what is and what should be (what "should be" is often defined culturally).

C. Patterns. Patterns exist which give clues about what is there and how persons perceive them. These patterns of behavior often constitute cultural meaning, as well as biological neccessity.

D. Leadership. Among human resources, you will probably find that leadership exists in many of the sub-areas of the community.

The following model describes this approach to looking at the community.

THE KINSHIP SYSTEM. The family provides a means for adding new members to the society. It also provides an environment for the training and socialization of children. The kinship system relates to all aspects of the family or extended family including elements such as descent, family authority, location of residence, inheritance, moral values and marriage.

THE EDUCATION SYSTEM. All societies provide a means of transmitting information to young members. This prepares the individual to live and function within the society in an acceptable way and to do so with some degree of independence. Elements of the educational system include schools, teachers, family members, books, and materials.

THE ECONOMIC SYSTEM. Each society has a means of acquiring and distributing goods and services which sustain the lives of its members. Many roles and institutions operate to meet these needs. They include the population of working people, the different types of enterprises, means of payment or exchange, and ecology.

THE POLITICAL SYSTEM. All societies regulate themselves and their relations with others. This regulation provides protection for the whole group. The political system controls the competition for power within the society. Elements of the political system include public services and utilities, government institutions such as courts, police and legislative bodies.

THE RELIGIOUS SYSTEM. Every culture is built around basic beliefs and values which provide an understanding of human existence and place in the universe. These beliefs are often manifested in the form of rituals and organizations.

THE RECREATION SYSTEM. All societies provide a means for recreation and relaxation. This includes games, dancing, singing, sports, storytelling, artistic pursuits, drinking parties, and pastimes.

THE ASSOCIATIONAL SYSTEM. In every culture, people who have similar interests tend to group themselves together. These associations may be for recreational, political, economic, or other reasons. For what purposes are groups formed? How many people belong to the different groups? Do they use symbols or slogans to identify themselves?

THE HEALTH SYSTEM. All societies are concerned about the survival of their members. Elements of the health system include nutrition, mother and child care, control of diseases, hospitals, medical personnel, and beliefs about health and its relation to medicine or the spirit world.

THE TRANSPORTATION AND COMMUNICATION SYSTEM. Every culture provides a means for people and goods to get from one place to another, and for information to be disseminated throughout the community. This includes postal service, bus system, roads, telephones, mass media and language.

(From: The Role of the Volunteer in Development. Core Curriculum, Peace Corps.)

A COMMUNITY DIAGNOSIS
WHAT YOU MIGHT LEARN ABOUT YOUR COMMUNITY

General Community Information

- Boundaries of community served, if known
- General physical features
- Socio-demographic information: population, ages, sex, births, deaths, fertility rates, infant mortality rates, direction and causes of migration, other population changes
- Health-related history of the community
- Types of community groups and social classes, neighborhoods
- Ethnic groups, where they live, relations among groups

Family Life

- How families are organized in this culture, the roles played by various family members
- Conflicts and coalitions among family groups
- How health-related decisions are made in the family, who makes them
- Role the family plays in health care: at home, in the dispensary, in the hospital
- Family health beliefs and practices
- How health care can be adapted to the needs and desires of the family

Political Situation

- Pros and cons of political involvement by outside health workers
- Who the leaders are:
  - In what areas of the community and on what topics do they assume leadership?
  - Who makes decisions that influence health and health care?

- How the local government operates

- What responsibility various levels and departments of government have in health

- Who makes decisions in the health area

- Other departments that operate indirectly in health care

- What the political parties in the area are; their involvement in health care delivery

- Relationship of health programs with local leaders and government officials

    - Changes needed in relationship
    - Government priorities in health
    - Possible program support from government
    - Potential difficulties
    - Arrangements necessary with government if program is likely to continue after you leave

- Impact of community factions on health programming

    - Ways to relate to various groups

- Cultural variations in political orientation and possible program adaptions to accommodate these variations

    - Orientation toward community development, community participation, authoritarianism, other types of political processes

Economic Situation

- Effect of standard of living on health and health care

- Employment picture: effects of unemployment and under-employment, physical handicaps, migration, job hazards, etc. on health

- Economic barriers to health care utilization

    - Payment problems and alternatives to cash payments

- General living conditions and financial means

    - How it affects the ability to follow through on treatment plans and provide care for the sick at home

- Effects of lowered mortality rates on economy

- Effects of economic development on health
- Financial structure of the health care system and of the program
    - Problems
- Problems of influence, bribery, and graft

The Education System(s)

- Basic information on education in the community
- Traditional education and patterns of learning
- Religious education
- Vocational training and apprenticeship
- Formal institutions: public and private
- Health program activities of the schools: possibilities
- Teaching health education in schools
    - Student customs affecting health teaching
    - Adapting teaching to student needs
- Teaching in the health center and in the community
    - Involvement of the community and local health workers
    - Adapting teaching to community needs
- Process of change and how best to promote it through health education

Religion

- Major religious groups and leadership
    - Beliefs and practices that affect health and health care
- Roles of religious leaders and followers in prevention, diagnosis and treatment of illness
    - Ritual and ceremonies affecting health
- Religious background of health workers and how it may affect their role as health workers

- Relationship of religious leader and healers in health programs

    Possibilities for collaboration

Communication

- Patterns of communications in the community
    - Who the important communicators are
    - Where various types of communication take place
- Channels of communication that could be used in health programs
    - Potential for using traditional channels of communication
- Methods for simplifying information
- Communication between staff and patients - barriers
- Communication among health workers
- Cultural differences in communication patterns
    - Taboo topics
    - Non-verbal communication
    - Confidentiality
    - Display of emotions
    - Silence
    - Styles of persuasion and explanation
    - Eye and body contact

Language

- Languages spoken (% of health workers, patients and community speaking each language)
- Problems due to language differences
    - Methods to bridge the gap
- Effects of language on perception and thought
    - "World view" of different groups

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- Use of interpreters in health programs
    - Advantages and drawbacks
    - Roles interpreters can play in programs
    - Ways interpretation can influence communication
    - Difficulties likely to arise during interpretation
    - Ways to improve to process

Health Conditions in the Community

- State of the environment
    - Hazards to health
- Prevalent diseases and conditions
    - Cause, symptoms, means of prevention and cure
- Other health problems in the community

Health Beliefs and Practices

Health and Illness

- Meaning and value of health; priority of health in relation to other needs and wants
- Beliefs and practices concerning health maintenance and prevention of illness
- Beliefs and practices concerning hygiene
- Ways that living conditions and resources affect health
- Beliefs and practices concerning cause, prevention, diagnosis and treatment of common diseases
    - Traditional views of disease
    - Types of practitioners consulted
    - Attitudes toward various diseases and those that have them
- Beliefs and practices concerning mental illness
    - Division of diseases into mental and physical

- Beliefs and practices concerning cause, prevention, diagnosis and treatment of both Western and traditional mental illnesses
  - Community's attitudes toward mental illness
- Death and dying: beliefs, practices and attitudes
  - Possible program adaptations

Nutrition

- Foods available, cost, how used in the diet, special beliefs, rules, prejudices, taboos, etc. concerning food
- Foods used to treat disease or other conditions
- Food storage, preparation and preservation
- Maternal and child nutrition
  - Foods eaten during pregnancy, lactation, infancy
- Problems in nutrition: obesity, undernutrition
- Ways in which changes in life styles have affected nutrition

Maternal and Child Care

- Prenatal care, beliefs and practices about pregnancy
- Beliefs and practices concerning childbirth
- Postnatal maternal and child care

Sexuality and Human Reproduction

- Beliefs and practices surrounding sex, circumcision, conception, etc.
- Family planning and birth control practices and attitudes
- Sexual modesty

Environmental Sanitation

- Water supply: sources, problems of contamination, improvements feasible?
- Disposal of human and non-human wastes
  - Practices and attitudes concerning fecal elimination
  - Possible improvements
  - Housing and living conditions
  - Health hazards and possible improvements
- Animal production and care; health hazards involved in current practices
- Pest control and health hazards caused by pests

Changing Health Beliefs and Practices

- Attitudes toward change
- Appropriate strategies for change

Health Systems in the Community

The Lay Health System

- The role of the sick
- Attitudes toward the sick
- Role of lay persons during illness: who in the community treats, when, how, etc.
- Heath referral system in the community

The Traditional Health System (Indigenous)

- Types of traditional practitioners and services offered
  - Methods used
  - Types of payment

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- Who the community practitioners are, location, facilities
- Organized systems of traditional care; systems of referral and/or cooperation
- Training
- Systems of hierarchy among practitioners, if any
- Attitudes of traditional practitioners toward "modern" system of medical care
- Utilization of the traditional system: by whom, when, why

The Modern Health System

- Types of modern practitioners and services offered; types of payment accepted
- Who the community goes to, location, facilities
- System of hierarchy if any systems of referral or cooperation
- Who uses this system, why

Patient/Practitioner Relationships Within Various Systems

- Types of relationship that exist
    - Cultural expectations of patients
- Possible adaptations of modern care, taking into account expectations of patients who are used to the traditional system of care

Interaction Between Traditional and Modern Practitioners

- Types of interaction
- Areas of conflict
- Possibilities for cooperation and collaboration

Structure of Projected Health Project

- Objectives of program
- Types of staff, lines of authority, relations among staff
- Arrangement of various services, program divisions
- Staff/community relations: problems and possibilities
- Relations with sponsoring organizations

Health Resources in the Community

- Economic resources available for health and health programs
- Community organizations and their possible contribution to a health program
- Community leadership, government and possible support
- Community involvement
- Use of community volunteers - attitudes toward volunteering
- Environmental resources available for health and health programs

(From: Brownlee & Tilford, The Health Education Process, Draft Paper)

Session 11

METHODS FOR LEARNING ABOUT THE COMMUNITY

TOTAL TIME 2 hours

OVERVIEW

In addition to knowing what categories of information they need to learn about the community and ways of collecting that information, participants also need to develop skills in gathering information that they will continue to use throughout their work as Peace Corps Volunteers. In this session, participants observe and act in two role plays. Through these role plays, participants practice their observation, listening, and interviewing skills, and examine cross-cultural considerations for gathering information. By the end of the session, the group has a firm set of guidelines to follow during the subsequent visit to the local community.

OBJECTIVES

- To practice observation, listening, and interviewing skills for gathering information.
  (Steps 3, 6)
- To identify appropriate and inappropriate behaviors or techniques used for gathering information in two role play situations.
  (Steps 3-5)
- To develop a set of guidelines for effective interviewing that is appropriate for the local community.
  (Step 5)
- To list other kinds of information-gathering techniques and tools for potential use in the future.
  (Step 6)

RESOURCES

Community, Culture and Care, Chapter 1

Handouts:
- 11A Suggestions for Gathering Information
- 11B Types and Sources of Information on the Community

Trainer Attachments:
- 11A Role Play #1: PCV and Local Mother
- 11B Role Play #2: PCV and Town Elder
- 11C Appropriate & Inappropriate Techniques for Informal Interviewing

MATERIALS Newsprint, markers, props for role play

PROCEDURE

Trainer Note

Prior to the session, prepare for the role play on informal interviewing (Steps 2-3) by asking a host country training staff person to play the role of a local mother. Provide the "mother" with her role description (Trainer Attachment 11A) and encourage her to include her own experience and ideas in acting out the role. Help the role players assemble appropriate props to make the scenario more life like. Also, ask for a volunteer from the group to play the part of the PCV, give him or her the role description, and again encourage creativity in acting out the role. Do not allow the two role players to plan out the action together. Instead, they should briefly think about their characters and act spontaneously in relation to what the other says and does. Emphasize to the PCV role player that the role is built around a Volunteer who has recently arrived in his or her community. Consequently the PCV will be far from the ideal image and will make many mistakes. As such, it is all right for the role player to make mistakes which the large group will discuss and learn from.

For the second role play which occurs in Step 6, elicit the help of another staff member to play the part of the town elder. Please note that the overall purpose of this second simulation is to point out several differences between formal and informal meetings and interviews.

Step 1
(10 min)

Making a List of Potential Techniques for Gathering Information

Open the session by having participants think back to the previous session and the plans they have developed for investigating the local community. Ask the group to make a master list of all the techniques or methods for gaining information they have mentioned in their plans. Explain that the purpose of this session is to explore observation, listening, and interviewing as separate and interrelated skills which all development workers need to practice in order to carry out effective community analysis. Demonstrate the importance of these three skills by underlining each item on their brainstormed list that involves observing, listening, or interviewing.

Step 2
(5 min)

Introducing a Role Play in Informal Interviewing

Explain to the group that they will now observe a role play illustrating an informal interview between a mother in the local community and a Peace Corps Volunteer who recently started his or her two year assignment there.

While the two role players are setting up, describe the scene for the group and explain their tasks as observers:

- Everyone tries to identify effective and non-effective behaviors and techniques used by the PCV while interviewing the mother.
- Each participant is also assigned one of the following: observation, listening, or cross-cultural concerns -- as a specific area to focus on during the action.

Trainer Note

The role play is designed to accomplish two goals. First, it provides the group with an example of interviewing that includes some appropriate and some inappropriate elements. All participants should try to identify these elements as they watch the action. Secondly, it helps participants become more aware of what they can learn from observation and listening, and how the cross-cultural nature of their situation affects communication. This can be accomplished by asking participants to count off one, two, and three: All the "ones" are asked to concentrate on using their observation skills to watch the action and note what the PCV is or is not learning with his or her eyes. All the "twos" are asked to focus on listening to the verbal messages being sent back and forth between the players and the meanings behind those messages. All the "threes" are assigned the task of paying attention to any aspects of the interview which are particularly interesting or difficult because of the interaction between two cultures.

Step 3
(15 min)

Acting Out the Role Play

Have the two actors do the role play of the informal interviews.

Step 4
(20 min)

Processing the Role Play

First, debrief the role players by asking them to discuss how they felt regarding the information they learned about each other and/or the community, and the difficulties they encountered gathering that information. Ask the large group to analyze the role play using the following questions to promote discussion:

General:
- What happened during the role play?
- What did the PCV learn about the mother and her community? What did the mother learn about the PCV?

For the Observation Group:
- What did the PCV learn primarily through observing the woman and her surroundings?
- What did the PCV miss observing that could have provided more information and insight?

For the Listening Group:

- What did the PCV learn primarily through listening to the mother?
- What did the PCV miss hearing that might have provided more information and greater understanding?
- What are some less obvious things we can try to listen for to gain more information? (e.g., the variation in kind and degree of emotion in someone's voice when discussing different topics, use of proverbs and idiomatic phrases for saying something indirectly, use of repetition, etc.)

For the cross-cultural group:

- What are some specific cross-cultural moments during the interview? Which moments did the PCV handle well? Which moments were difficult for the PCV and mother and what could the PCV have done to improve communication?
- Did the PCV use open, closed, and/or leading questions? What kinds of answers do these three kinds of questions elicit? How can we use them more effectively?

As the group identifies appropriate and inappropriate behaviors exhibited by the PCV during the role play, write them on newsprint, (one sheet for the "good" behavior, another for the "not so good").

Trainer Note

See Trainer Attachment 11C for a list of appropriate and inappropriate techniques for informal interviewing.

Step 5
(15 min)

Guidelines for Effective Interviewing

Ask participants to work down the newsprint list of inappropriate behaviors, giving suggestions for how they could change those into appropriate behaviors. Have a member of the group add these to the newsprint list of appropriate techniques.

Have the group look at the entire list of appropriate techniques from the role play. Ask them to use this list to develop a set of guidelines for conducting informal interviews in their communities. After they discuss and write the guidelines, ask the group to discuss how these guidelines might be modified for more formal situations, such as an interview with the town elder or village chief.

Step 6
(30 min)

Role Playing a More Formal Situation

Ask participants to apply what they have discussed thus far to a role play in which a PCV interviews a town elder. Give a volunteer from the group the role description for the part of the PCV. Allow a few minutes for the preparation. Meanwhile, introduce the staff member who will play the role of the elder and set the scene for the group. Have the role play (approximately 10 minutes), debrief the players themselves, and then ask participants to discuss:

- the differences in technique/approach between the informal and more formal interviews
- how interviews with mothers, clinic health workers, merchants, and village elders might vary in style and in the kind of information which may be learned.
- the potential use of the other kinds of information-gathering techniques that were mentioned in Step 1 (e.g., random survey, systematic observation, indexing, reading signs/maps/posters, looking at health records, etc.)

Step 7
(15 min)

Reviewing Plans for the Community Investigation

Distribute Handouts 11A and B, (Suggestions for Gathering Information" and "Types and Sources of Information on the Community) and tell participants to use them for supplemental information and ideas. Also suggest that they read through Chapter 1 of Community, Culture and Care. Have the work teams (from Session 10) assemble and look over their plans for the community investigation. Ask them to use the rest of the hour to incorporate into their plan any new ideas and information gained from this session.

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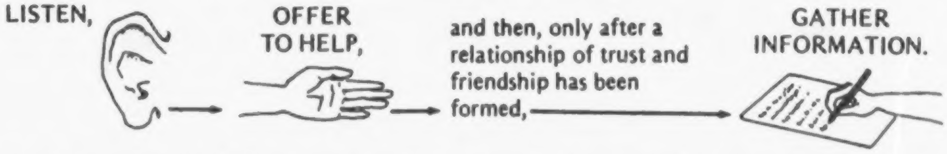
SUGGESTIONS FOR GATHERING INFORMATION

There are no set rules or one 'right' approach for gathering needed information in a community. However, several people-centered programs have come up with the following ideas:

1. Go to people's homes and get to know them. But **do not start by taking a survey.** Information learned through friendly, casual visits is often truer and more useful. Put the needs and feelings of the people first.


LISTEN,
OFFER TO HELP,
and then, only after a relationship of trust and friendship has been formed,
GATHER INFORMATION.

2. When gathering information, try to **find out what problems people feel are most important** or want to solve first. **Learn what ideas they have** for solving them.
3. **Ask only for information that makes sense** (and not simply because you were told to collect it). Be sure you and the people understand **why** the information is needed. For example, be sure parents understand why you weigh children **before** you do it.
4. **Involve local people in gathering the information.** Be sure studies are not *of* the people, but *by* the people. (For simple surveys in which children and non-literate people can take part, see p. **7**-13 and Chapters 24 and 25.)
5. When conducting a survey or community diagnosis, **try to avoid taking along written questionnaires.** Avoid writing notes while a person is talking to you. Listen carefully, remember what you can, and **write your notes later.** Always be honest and open about the purpose of your visit.
6. Look for ways of making the survey a learning, exploring experience for those being questioned. Try to ask questions that not only seek information, but that also get people thinking and looking at things in new ways.

   For example, instead of simply asking, "How many people in your family can read?" follow up by asking, "What good is it to know how to read and write?" "Does the school here teach your children what they most need to know?" "If not, who does?" (For more ideas about this type of question, see *Where There Is No Doctor,* p. w10 and w11.)
7. Observe people carefully. You can find out as much by watching the way people act and do things as you can by asking questions. Learn to look and listen.
8. **Go slowly when giving people advice,** especially when it concerns their attitudes and habits. It is often better to tell a story about how others solved a similar problem by trying a new way. And **set a good example yourself.**

Note: Where official records of births and deaths are fairly accurate, these can also provide important health information without bothering people in their homes. It is a good idea to compare the ***deaths in children under five*** with ***total deaths.*** For example, in one area of the Philippines, a rise in children's deaths from 35% to 70% of total deaths between 1975 and 1980 shows that conditions affecting health are getting worse!

(From: Werner and Bower, Helping Health Workers Learn, Chapter 6, p. 9)

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TYPES AND SOURCES OF INFORMATION ON THE COMMUNITY

TYPES	SOURCE
ON THE COMMUNITY	
Attitudes and customs relating to matters other than health, e.g., communication between leaders and people. Who are the leaders in the community? Who makes decisions and how are decisions made? Are there traditional health workers such as birth attendants, healers, a medicine-man? Other health and health-related agencies.	Listening to and talking with people in the community. Reading material, if available. Talking with other health and development workers. Talking with teachers and religious leaders.
Geographical features Transport facilities Public facilities: water, sanitation, market, school, farming, food production. Source of water.	Map of area
TO IDENTIFY PEOPLE	
Name, age, sex, address	Registration cards Health Centre records Community survey.
ON PEOPLE'S HEALTH	
Kinds of health problems and when problems occurred.	Monthly reports Outpatients records
Number of expectant mothers attending antenatal clinics.	Clinic records
Number of births each month or each year (live and stillbirths) and sex.	Clinic records or survey of children under one year in the community.
Number of mothers who die from childbirth in past year. Number of deaths by sex, age, and presumed cause.	Clinic records or direct questioning in the villages. Possibly, health centre records or through community officials.

TYPES	SOURCE
ON HEALTH WORK BEING DONE	
Number of people seen each month and why.	Monthly report
Treatment given, kinds of health problems.	
Special campaigns held.	
ON MATERIALS USED FOR HEALTH WORK	
Drugs supplied.	
Drugs used.	Stock ledger and inventory.
Other supplies.	
Estimate of supplies needed for a period of time.	
ON THE PROGRAM AND ON OTHER HEALTH WORKERS UNDER SUPERVISION	
Program:	
What people feel they need acceptance of programs other program needs coordination with other agencies.	Listening to the community, particularly the leaders. Talking with other community development workers. Supervisor.
Health Workers:	
Needs for training quality of work planning relations with community and other agencies for use of resources.	Supervisory check-list for visits to the community.

(From: WHO, *On Being in Charge*.)

Role Play #1: The PCV and a Local Mother

Scenario

A PCV has recently arrived in his or her community or small town to begin work in a primary health care program. The Volunteer wants to begin getting to know people in the area and needs to start gathering information regarding a number of aspects of community life. Today, the PCV has arranged an interview with a mother to gain baseline information on the local diet and nutritional practices and needs of the community. They have decided to meet at the woman's house sometime around mid-morning.

Role Description

Peace Corps Volunteer

You have recently arrived in your site and are anxious to get to know the people in your community so you can get started on some projects. You've taken out some of your notes from training on community analysis and the KEEPRAH model. From those notes you have planned some questions and topics to discuss with a mother in your community; specifically, you want to find out information on the local diet, as well as nutritional needs and practices perceived by her. You don't know the mother very well at all -- one of the nurses from the local clinic introduced you briefly last week. You do know that she has been to the clinic for some kind of treatment or advice, that she has several children and a husband, and that she lives on the poorer side of town. You are scheduled to meet with her mid-morning at her house.

Mother

You are a typical mother in your small town. You have five children who often get sick. Your husband is a blacksmith's assistant with regular work, but meager pay. Lately, you've had some extra financial needs and the money left over to buy food has been inadequate. Like your friends, you've noticed the climbing prices of food in the market due to the recent drought. These days you're definitely finding it tough to keep your family's stomachs full, nevertheless you still take pride in being able to cook the traditional dishes of your people. You also keep your tiny house very clean.

Today you are in your house waiting for the arrival of a new American who just moved to your town. It's mid-morning and you are busy trying to finish the noonday meal early so you won't be too occupied with chores while he or she is there. You plan to ask him or her to stay and eat with your family and, in fact, you've prepared something special just for him or her. You are curious to see who this American is and what she is doing. As is customary in your culture, you usually answer or respond to people with indirect statements and use many gestures and non-verbal cues.

Trainer Note

Adapt these brief role descriptions to fit your particular cultural situation, or if possible, ask the role players to make up a similar character based on someone they know. Ask the role players not to interact beforehand. Be sure you read or tell the group the scenario as described above or as modified by you.

Role Play #2: The PCV and the Town Elder

Scenario

Same as for Role Play #1 except that this time the PCV will interview the town elder at the main community meeting hall in the center of town.

Role Descriptions

Peace Corps Volunteer

You are recently arrived at your site and are anxious to get to know the people in your community so you can begin working on some projects. In particular, you are interested in gathering information on the local diet and nutritional status and needs of your community. You have an opportunity to meet briefly with the village elder and talk about the nutritional issues as well as other concerns. You have already met and spoken very briefly with him when your counterpart first brought you into town. He seems interested in your work, but seems reserved.

Town Elder

You represent the local political system in the village and as such understand the economic structure and traditional systems that form the base for the community. You are very proud of your community and want to see it develop but not at the risk of losing the traditions that define your life and those of you neighbors. You have always maintained an aloof interest in the Peace Corps Volunteers. Today, the new volunteer in town will be coming in to conduct an interview.

Trainer Note

As in the first role play, adapt these roles to fit the local culture and the PCV's work description. Be sure to set this role play up such that it is more formal than the first.

Appropriate and Inappropriate Techniques for Informal Interviewing

Appropriate	Inappropriate
Properly greets the person, introduces self, asks if the person is free to talk, explaining the purpose of the interview.	Walks in without permission, no personal introduction, no explanation of the purpose of the visit.
Inquires about the interviewees personal well-being, family, etc.	Starts right into data collection - no real attempt to become acquainted.
Uses observation and listening skills to learn about the interviewee's life, family, and work (e.g. watching/helps in the preparation of a meal).	Talks a great deal, focuses directly on the interview topic rather than the surrounding circumstances.
Offers to participate in any activity that may be going on or starting up. (e.g., cooking, weeding the garden, etc.)	Holds strictly to the task of asking the interview questions.
Gives the interviewee time to talk, room to express ideas, opinions, shows interest in interviewee's problems.	Frequently interrupts when interviewee is speaking, appears hurried or disinterested, passes judgement on what interviewee says.
States questions in a clear manner. Uses open and factual questions appropriately. Restates questions when necessary. Only writes answers down if given permission.	Asks too many closed or leading questions, follows the list too closely, writes answers down while ignoring the interviewee.
Doesn't stay too long or leave too abruptly - looks for signs that it's time to go.	Stays until all information has been obtained, asks questions quickly and runs.
Thanks the interviewee for his/her time and help, mentions possible visit in the future or when they might see each other again.	Collects notebook, gives cursory good bye and leaves.

(Adapted from: From the Field, World Education)

Session 12

LEARNING ABOUT THE COMMUNITY

TOTAL TIME 6 hours

OVERVIEW

Having planned what information they want to learn about the community as well as how to gather that information, participants now visit and conduct a simple investigation in a local community. Working in their teams of three, participants use assessment skills along with other skills and knowledge learned in language and cross-cultural training. During Session 13 they will share their experiences and analyze the information they gathered during the day.

OBJECTIVES

- To gather general information about the surrounding community and become acquainted with community members.
(Step 1)
- To gather specific information in the community about health behavior and at least one of the other subsystems of the KEEPRAH model using plans developed during Session 10.
(Step 1)

RESOURCES Community investigation plans from Session 10.

MATERIALS Paper, pen.

PROCEDURE

Trainer Note

Well in advance of this session, contact the host community, by visiting leaders in the town government, schools, health centers, as well as homes of certain families who know you or other members of the staff. Explain the purpose and date of the field visit.

Step 1 (10 min) **Preparing to Conduct the Community Study**

Ask the group for any last minute questions they might have before going out into the community. Explain to participants that they within their work teams they should assume one of three roles - interviewer, observer, or listener as they interact with various community members. Ask the team members to rotate in these roles such that they each have an opportunity to experience all three roles. Ask participants to informally discuss their experiences in their work teams before Session 13.

Trainer Note

If possible and if indicated, couple each team with someone who has local language capability. If this person is a current volunteer, request that person to act only as interpreter and not be directly involved in gathering information or leading the group in any way. Be sure to give the group a way to contact you in case of emergency. Tell them that when they return to the training site they should spend a half-hour or more reflecting on the day's experience and informally discuss and record:

- the information they gathered
- problems they encountered in getting to various places in the community and finding people with whom to talk
- techniques for gathering information that worked well for them and those with which they had problems.
- mistakes they made
- most valuable learnings that came out of the 6 hour investigation

Explain to the teams that they will be given 30 minutes at the beginning of Session 13 to prepare a presentation of their information for the large group.

Step 2 (6 hours) **Conducting the Field Visit**

Wish the participants good luck and send them on their way.

Session 13

COMMUNITY ANALYSIS

TOTAL TIME 3 hours

OVERVIEW During the field visit in Session 12, the participants collected a variety of information about a community. In this session they share their experiences from the field, including what they learned, how they learned it and difficulties encountered in the process. They analyze this information in terms of its accuracy, completeness, and what it suggests about factors affecting the health of the people in the community.

OBJECTIVES

- To describe the difficulties encountered in gathering information about a community. (Steps 1, 2)
- To share information collected in the community and identify three to five potential development problems perceived by community members. (Steps 1, 2, 3)
- To compare community-level and government-level perceptions of development problems. (Step 3)

RESOURCES Community, Culture, and Care, Chaps. 1 and 2
Participants data collected in Session 12.

MATERIALS Newsprint, markers

PROCEDURE

Step 1 (35 min) **Interpreting Data and Preparing Reports**

Open the session by asking participants to each describe his or her experience in the community with one descriptive adjective. Move in order around the room until everyone has given their one word descriptions. Ask the teams that worked together in the community to meet and prepare a concise presentation of their investigation for reporting to the larger group. Explain that they should base their 7-12 minute presentations on the discussion points mentioned below in the Trainer Note. Post these points on newsprint in front of the room and tell the groups they have approximately 30 minutes for preparation. Make markers and newsprint paper available to the work teams and encourage them to be creative.

Trainer Note

The work teams should address the following points already mentioned in Step, 1, Session 12:

- the information they gathered.
- problems they encountered in getting to various places in the community and finding people with whom to talk.
- techniques for gathering information that worked well for them and those with which they had problems.
- mistakes they made.
- most valuable learning that came out of the 6 hour investigation.

In addition, they should try to answer the following question:

- What is the relationship between the non-health subsystem you selected and the health subsystem of this community? (what is the relationship between the subsystem Education and the subsytem Health?)
- What do community members perceive as their primary development problem regarding health and the other subsystem you investigated?
- What process did you use to answer the above question? (i.e., how did you interpret your data?)

As the teams prepare the reports, circulate around the room making sure everyone is on track and addressing the appropriate concerns.

Step 2 (60 min) **Work Team Presenations of the Community Investigation**

Have the groups give their presentations. Allow time at the end of each presentation for comments, questions, and feedback regarding the presentation itself, and the analysis and interpretation of the data collected.

Trainer Note

Encourage dialogue between the presenting team and the rest of the group.

Be sure to hold each team to the time restrictions during the presentations. You may want to ask for a volunteer from the group to act as timekeeper so that no one group uses too much time.

The time allowed for this step assumes that you are working with no more than five teams. If the group is larger, you'll need more time for the reports.

Step 3
(20 min)

Drawing Conclusions About the Community and Its Development Status

Ask the group to consider all the community's development problems (especially health-related) that have been identified during the presentations, and list five major ones on newsprint. If possible, ask participants to prioritize the five problems as they think the community would do. Then ask the group to compare these problems or perceived needs with what they have learned thus far regarding the government's perception of the community's needs. particularly in realtion to primary health care.

Have the group identify any projects in the community they are aware of that are addressing any of these areas of need. Finally, ask participants to briefly examine where among these problems the Health Volunteer can be of the most help.

Trainer Note

One method for comparing community and government perceptions is to chart it as follows:

	Community Perceptions of Needs	Shared Perceptions	Government Perceptions of Community Needs
High Priority			
Low Priority			

Participants may not have sufficient information to conduct a very meaningful comparison here. If that is the case, provide them with enough extra data to complete the exercise. The main goals of this step are to help the group; 1)recognize the differences and similarities in perception at the regional and local levels and 2)contemplate the Volunteer's role in and responsibility to both the community and the Ministry or government agency.

Step 4 (25 min) **Drawing Conclusions about the Process of Analyzing a Community**

Now ask the participants to examine the process of community analysis. Have them reflect on their experience in the community and use these questions to guide the discussion:

- **How well did the KEEPRAH model work as a tool for this investigation?**

- How well did your team's strategy/approach work for gathering information? How did it have to be modified?
- How well did your work team function together? How did you make decisions regarding who did what? How might you have worked better together? How can you apply this experience to gathering information with a counterpart?
- What are some specific factors which affect the attitudes of the community toward the PCV as well as the PCV's attitude toward the community? What are some things the PCV can do to overcome or diminish these limiting factors?
- What are some factors that influence the PCV's ability to gather, accurately interpret, and utilize the information on the community? (E.g., language, logistics, government approval, etc.) Again, how can some of these be overcome?
- What would be several rules-of-thumb to keep in mind when you first get to your site and begin learning about the community?

Trainer Note

If time allows, have a participant record the group's response to the last three questions and make this into a handout later for participants to take with them.

Be sure to keep the group focused on the process of community analysis rather than the content which has been sufficiently discussed in Step 3.

Step 5
(25 min)

Beginning a Plan for a Second Investigation in the Community

Explain to the group that sometime during the next few days or the following week they will be visiting a local health clinic and that one of the overall goals of the visit is to gather information on how the clinic is organized to function as a community health service. (See trainer note below.) Ask participants to divide into small groups and begin a plan for 1) what specific information they need to gather in order to understand the way the clinic works, and 2) how they can find that information at the clinic. Remind the group to keep in mind the problems they encountered in their recent investigation and to apply what they've learned today to the new plans.

Trainer Note

The idea here is to give participants a chance to apply what they've learned about information gathering and analysis by asking them to begin a plan to investigate a local clinic. The clinic may be a nutrition rehabilitation center, an MCH clinic, or another health service appropriate to the technical focus of the training. Participants only begin their plans here at the end of this session. The rest of the planning and the actual clinic visit should occur in conjunction with one of the content modules (Health Education, MCH, Nutrition and Disease Control).

During the planning, suggest that the participants team up with group members who were not part of their earlier work team.

Move around the room checking with the small groups and answering questions.

Session 14

WORKING WITH THE COMMUNITY

TOTAL TIME 3 hours

OVERVIEW

Community involvement is a theme that runs throughout this and other Peace Corps training. Trainees need to strengthen skills for involving community members in all aspects of Primary Health Care projects and motivating changes to improve community health and self sufficiency. Participants have already practiced techniques for learning about the community. In this session participants identify techniques to use to involve the community in health projects. They discuss ways to work with local leaders and organizations as well as ways to ensure women's involvement in health project decisions. They practice these techniques in role plays dealing with problem situations in community health work.

OBJECTIVES

- To identify techniques for involving and motivating the community in projects to improve community health.
  (Steps 1-5)
- To describe ways to ensure that women are involved in all steps of the health education process.
  (Step 3)
- To practice techniques for involving and motivating the community in problem situations .
  (Steps 4,5)

RESOURCES

- Bridging the Gap
- Community Culture and Care. Chapters 5 and 6.
- "Community Involvement" (WHO Supervisory Skills)
- Helping Health Workers Learn, Chapter 6, pp.11-24, Chapter 26 pp.16-34.
- Community Health Education in Developing Countries, (Peace Corps) pp.13-16.
- The Role of the Volunteer in Development (Peace Corps)
- Third World Women: Understanding Their Role in Development (Peace Corps)

Handouts:
- 14A Questions to Ask About Involving the Community in a Health Project
- 14B Skills for Development Facilitators
- 14C A Checklist for Use in Identifying Participatory Components of Projects.
- 14D Helping the People to Organize
- 14E Problem Situations (to be developed by the trainer)
- 14F Ways to Involve Women in Health Projects

Trainer Attachments:
- 14A Factors Affecting Participation in Rural Development Projects.
- 14B Motivating the Community: an Immunization Example
- 14C The Village Nutrition Action Program in Thailand
- 14D Examples of Problem Situations

MATERIALS Newsprint and markers

PROCEDURE

Trainer Note

It is important to coordinate this session with session the Role of the Volunteer in Development, Women in Development, and Cross-cultural Training, to assure consistency in approach and avoid unnecessary duplication of activities.

Prior to this session ask participants to read the following sections in Helping Health Workers Learn: Chapter 6, pages 11-20 (Community Dynamics and Participation) and chapter 26, pages 16-34 (Paulo Freire's Method of Conscientization). Also distribute Handout 14D (Helping the Community to Organize) for reading before the session. Suggest that they think about the following questions as they read:

- Why is it important to involve the community in health projects?
- What are the best ways to involve communities in projects?
- What problems could make it difficult to involve communities?

Continued

Prior to the Session ask a participant to read Trainer Attachment 14D (The Village Nutrition Action Program in Thailand) and prepare to summarize the project in Step 2 of this session. Also give them the discussion questions listed in Step 2 as a guide for the presentation.

At least one day before the session, ask each participant to talk with someone in the family with whom they are living or one of the training site staff to get information about one local leader or one organization interested in health-related problems for discussion during Step 3 of the session. If you use the optional step on Involving Women in Community Projects, also request that they ask that same person and someone of the opposite sex what opportunities and obstacles there are for women's participation in planning and carrying out a community health project such as a community clean-up campaign. Try to identify a specific on-going or past community project that the participants can ask about so that the questions will be more concrete.

Step 1
(20 min)

Factors That Help or Hinder Behavior Change

Introduce the session by explaining that the group will be looking at ways to work with the community to improve community health and increase self reliance. The first step is to look at reasons why people might be resistent to change .

Ask everyone to hold up one hand. Ask them to put their hand down if they cannot answer yes to one of the following questions:

- I never smoke cigarettes.
- I always wash my hands with soap and water before and after I eat.
- When I am sick I always do what the doctor or nurse tells me to do.
- I always wear a seat belt when I ride in a car.
- I never skip meals.
- I always drink plenty of liquids when I have diarrhea rather than taking something to stop it up.

Ask participants to think about and discuss why they behave in ways that they know are harmful to their health.

List their reasons on newsprint and ask them to discuss questions such as the following:

- What keeps you from changing behavior that you know is harmful to your health?
- What kinds of questions do you ask when you are considering changing a habit?
- What conditions could help you change these habits?
- Do people in the community ask themselves the same kinds of questions before changing habits or deciding to participate in a health project?
- What keeps them from changing harmful habits?
- What conditions could help them change harmful habits?

Trainer Note

Some of the reasons for continuing habits harmful to health that you can expect from the discussion are:

- They do not perceive themselves as susceptible to any illness or accident.
- They do not realize the severity of the illness
- The new behavior does not fit their social or cultural norms
- They prefer to use their resources in different ways.
- Friends or family would be angry or upset if they changed the old behavior

Be sure to make the point that people's behavior is influenced by many factors, not just knowledge alone. Social influence, resources, and attitudes,and perceptions also influence behavior. You may want to refer to Trainer Attachment 14A (Factors Affecting Community Participation in Health Projects) for specific examples of factors.

Some of the questions people ask before changing a habit or adopting a new practice that should come out of the discussion are:

- What will I gain from this change?
- How soon will I enjoy this benefit?
- What can I lose from making the change?
- What kinds of economic resources, knowledge and skill are needed to make the change?
- How much of my time will it take
- Will it conflict with other more important activities?
- Will I get as much out of the change as my neighbor, my spouse, others?

Step 2
(20 min)

Discussing Ways to Involve the Community

Ask the preassigned person to describe the Village Nutrition Action Program in Thailand or similar case example of a project that emphasizes community involvement.

Ask participants to listen carefully to the description of the project, and recall their reading of the example of community involvement in Guatamala in Helping Health Workers Learn .Ask them to keep the following questions in mind for discussion:

- Why is it important to involve the community in planning and carrying out a health project?
- In what ways can community members participate in a health projects?
- What questions should we ask when deciding how to involve the community in health projects?
- What techniques can we use to motivate community members to participate in projects?

Lead a discussion of the questions and ask someone to list the answers for each. Ask them to think about their visit to the community earlier in this training, and briefly discuss how they would involve local people in a project. You can also use Trainer Attachment 14D (Motivating the Community: Immunization Example) to help you guide the discussion.

Distribute Handouts 14A (Questions to Ask About How to Involve the Community in Health Projects),14 B (Skills for Development Facilitators) and 14C (A Checklist for Use in Identifying Participatory Components of Projects) as sources of valuable tips on how to involve the community in health projects at all stages and how to assess to participate at each stage. Also recommend Chapters 5 (The Family) and 6 (Politics) in Community Culture and Care as basic background on social organization in the community.

Trainer Note

Important points about community involvement that can be raised in this discussion include:

- If people participate in a project they will be more interested in helping themselves in the future and less dependent on outside experts and resources (encourages self reliance).
- They will be more committed to taking the action necessary to carry out the project.
- Until people recognize and understand a problem they will not be interested in solving it
- Local knowledge and expertise should be included in the project planning so that the way the project is carried out will be better adapted to local needs.

Some important points to bring up in the discussion of ways to involve the community include:

- Continue learning about the community.
- Communicate clearly.
- Listen carefully to what people have to say.
- Establish trust and credibility in the community.
- Gain the support of community leaders who can mobilize resources (money people and materials).
- Develop community cooperation and leadership at the village level (Freire's approach).
- Start with a project villagers want even if it does not appear most relevant to improving health.
- Start with a project that will produce results quickly before going into more long-term efforts.
- Build on local self-help traditions, beliefs, customs and religious values.
- Practice what you preach (provide a good role model).
- Use teaching techniques that actively involve community members (active discussion with open-ended questions, role play drama, peer teaching).

You may want to mention that this list of techniques is based on studies of successful health projects.

Step 3
(20 min)

Finding and Working With Local Leaders and Organizations

Ask two or three participants to share what they learned about local leaders and organizations when they talked with community people the previous evening. Use this experience to lead a discussion on how to identify and work with local leaders,and organizations, including information from Handout 14D (Helping the People Organize).

Some discussion questions to ask are:

- Why involve leaders in a health project?
- How do you discover local formal and nonformal leaders?
- Does a leader necessarily represent everyone in the community?
- How can leaders and organizations contibute to the success of a project?
- How can leaders or groups create problems for health projects?
- How do you motivate leaders and groups to participate in a health project?

Trainer Note

The answers to the discussion questions are covered in Handout 14D (Helping the Community to Organize).

If you decide not to use Optional Step 3A (Involving Women in Community Projects), bring out some of those discussion questions in this step and refer to the example of the negative results from excluding women from the project in Tonga, described in Handout 14D. Also distribute Handout 14E (Ways to Involve Women in Health Projects).

Tell the participants that they will practice techniques for working with leaders and organizations at the end of this session and in Session 15 (Organizing a Health Committee).

Step 4
(45 min)

Dealing With Problem Situations in Community Health Work

Have the group divide into four small groups. Give each group four problem situations to discuss Handout 14 (Problem Situations). Assign one of the situations to each group. Give them 25 minutes to prepare a 10 minute role play, demonstrating the group's solution to the problem. Ask them to spend no more than five minutes discussing each problem situation, identifying the problem, and deciding what techniques to use to try to solve it.

Trainer Note

Ask one person in each group to serve as facilitator for the group. Ask another to be recorder. Explain that this activity will enable them to practice some of the techniques they have discussed during this session. Encourage them to use the handouts and ideas from the earlier discussions to develop their role plays. Circulate among the groups while they are working and answer any questions.

Step 5
(60 min)

Presentation of Community Organization Solutions

Reconvene the large group and have each small group present their skit illustrating their solution to the problem. Discuss each role play using some of the following questions to guide the discussion:

- What was the major problem in this situation?
- What community involvement techniques were used? Were they appropriate?
- In what ways did the group involve the community?
- What are the major strengths of the solution?
- How could the solution be improved?
- Did the activities during the session prepare you for dealing with the problem situations?
- Will you be able to apply any of these solutions in your future work?

Close the session by discussing the ways that participants can involve the local community in the host country setting and the problems they are most likely to encounter. Explain that they will be practicing these community organization skills and gaining new ones in Session 15 (Organizing a Health Committee).

Optional
Step
(30 min)

Involving Women in Community Projects

Ask a few people to share what they learned about opportunities and barriers to the participation of women in development projects in the local community. List the information from men and women villages separately.

Have participants look at the potentials and the barriers and discuss ways to involve women in health projects in this community. Distribute Handout 14F (Ways to Involve Women in Health Projects) as a reference.

Trainer Note

If the participants will be focusing on women in development projects or have not covered Women in Development thoroughly in their other training you may want to include this step after Step 3. You will find valuable resource material in Third World Women: Understanding Their Role in Development, particularly the article by Judith Hermanson on "Women in Development: Defining an Approach", in Module V-8.

Handout 14E (Ways to Involve Women in Health Projects) can be used to guide the discussion of ways to involve women and distributed as a reference.

Be sure to make the point that the way to involve women in projects varies with the cultural and social setting. There is no one way to involve women in projects. The approach must be community specific.

QUESTIONS TO ASK ABOUT INVOLVING THE COMMUNITY IN A PROJECT

Leader Support

Who are the important formal and nonformal leaders in the community?

Are there particular leaders that deal with health-related problems?

Should any of these leaders be contacted for permission before attempting to involve the community in a health-related project?

How could the leaders help involve the community?

Organizations, Groups, Individual Support

What individuals, groups, and organizations in the commulty would probably be interested in health-related activities?
Why?

Are there any individuals, groups,etc. that might be opposed to efforts in this area?
Why?

Are there any groups that might not have access to the benefits of the project?

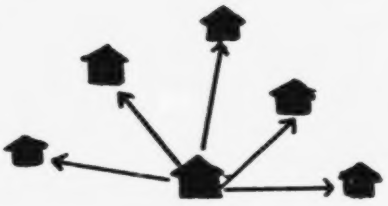
Human Resources

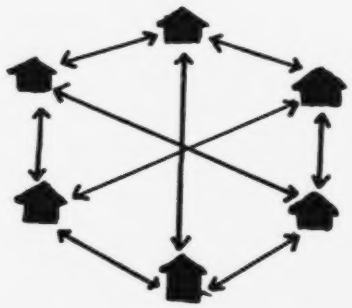
What individuals, groups or organizations might have skills that would be useful in a health project?

Local Patterns of Communication

What types of social situations are most appropriate for exchanging what types of information?

How does the information spread in a community or group? (that is, between which people and in what ways?) Two different patterns are illustrated below:





What local gestures, sayings, clothing styles, and other traditions are used in sharing information or entertainment?

What objects, pictures or language are restricted or forbidden?

How do people teach children how to behave properly and to perform tasks?

What are the possible means of communication that could be used to involve people in the development of a project?

What means of communication are traditionally used for various types of messages?

Would use of these traditional means of communication be appropriate when trying to get people involved in a project?

Local Patterns of Cooperation

Do community groups traditionally work together on community projects?
If so, how do they organize to work together?
If not, why not?

Are there alternative ways to tackle problems in the community?

(Adapted from: Draft Peace Corps Training Materials prepared by Ann Brownlee)

SKILLS FOR DEVELOPMENT FACILITATORS

Basic Skills

Throughout the stages of community development, the facilitator should:

1. Demonstrate an understanding of non-formal education through the use of:
    - a variety of communication techniques.
    - problem-solving activities.
    - methods that motivate others to actively participate in the education process.
2. Stimulate planning and project implementation through the use of local skill, knowledge and resources during:
    - needs assessment and planning.
    - health education activities.
    - follow-up.
    - project review.
3. Use on-going methods of evaluation of community involvement.

Taking the First Steps

When the facilitator starts working with a community or group, he/she should:

1. Understand and be able to express his or her:
    - motivation.
    - expectations of the experience.
    - strengths and weaknesses.
    - role as a facilitator.
    - individual values.
2. Be sensitive and able to identify:
    - expectations of the local community or group.
    - local culture and resources, including customs, values, knowledge and ways of life.
3. Communicate in ways that demonstrate:
    - active listening and observation skills.
    - an ability to filter information.

- skill in working cooperatively and in collaboration with others.
- an understanding of the participatory approach to development.
- an ability to promote local self-reliance, integrity and well being.

4. Use appropriate on-going techniques for evaluating community involvement.

Establishing a Dialogue

In the next stage of involvement, the facilitator should:

1. Demonstrate skills in facilitation and organization that include:
    - an ability to work with existing local social structures and groups.
    - stimulating active local participation.
    - motivating others to contribute their skills and knowledge.
    - planning and facilitating meetings, when appropriate.
    - sharing techniques for effective problem solving, team building and negotiating.
2. Be able to examine, analyze and prioritize issues, concerns and needs within the local context.
3. Understand and be able to discuss development issues in relation to local problems and strategies for change.
4. Continue to develop skills in interpersonnal communcations, including:
    - encouragement of local leadership,when appropriate.
    - building trust and confidence.
    - consultation (e.g., active listening, conferring and feedback).
5. Continuation of community involvement.

Planning with the Community

In planning for active commulty participation, the facilitator should:

1. Collaborate with the local community or group to identify:
    - health needs
    - esources
    - goals and objectives
    - potential problems or limiting factors
2. Assist in the establishment of:
    - project criteria
    - plan of action
    - methods of project evaluation
    - relationships with appropriate organizations and agencies to form a supportive network.
3. Clarify the kind and extent of his/her involvement in the project.
4. Continue evaluation.

Evaluating the Process

In order to learn from, and improve upon the experience of working with a community or other group, the facilitator should:

1. Work with community leaders to develop and use appropriate evaluation criteria and techniques.
2. Use a continuing process of evaluation to:
    - review the level of local participation.
    - review methods and approaches used during development work.
    - assess the level of local self-reliance and well-being.
    - generalize and apply theknowledge gained to increase in extent and benefits of community involvement in health projects.

(Adapted From: A Training Manual in Appropriate Community Technology. Peace Corps)

A checklist for use in identifying participatory components of projects

The following checklist can be used to assess project proposals as well as for project monitoring and evaluation.

A	*Highly participative*
B	*Participative*
C	*Somewhat participative*
D	*Non-participative*
E	*Authoritarian*

1. Project planning process:

— through initial open discussions with the community of its problems and how to solve them	*A*
— through a discussion of the project proposal with opinion leaders from the community	*B*
— through discussions with government/non-government organizations at district/block/project level	*C*
— project thrust from the outside without discussion	*D*
— project imposed in absolute disregard of community's wishes	*E*

2. Identification of the needs:

— by the people themselves	*A*
— by local opinion leaders	*B*
— by a government agency	*C*
— by a centrally sponsored scheme	*D*
— by fiat	*E*

Excerpted from the *Report of the Community Participation Workshop*, Agra, May 1981, organized by UNICEF, New Delhi, pp. 13-16.

3. Extent of resource mobilization for the project:
    - by the community *A*
    - by the community and others *B*
    - through matching contributions *C*
    - through massive external assistance *D*
    - with no contribution from the community *E*

4. Identification of project workers:
    - by the community with its own criteria *A*
    - by the community with imposed criteria *B*
    - appointment of local persons by outside implementing agency *C*
    - appointment of outsiders *D*

5. Development of social and/or technical skills:
    - through short, local pre-service training, followed by regular, on-the-job, in-service training, in parallel with the training of trainers from within the community *A*
    - through short, local pre-service training, followed by regular, on-the-job, in-service training *B*
    - through pre-service training within the district/town followed by some in-service training *C*
    - through pre-service training in a remote institution without any follow-up in-service training *D*
    - no training or training in an unfamiliar language *E*

6. Project implementation:
    - under community control (especially the remuneration of project workers) *A*
    - under community supervision *B*
    - with some community involvement *C*
    - with no community involvement *D*

7. Periodic evaluation/monitoring of progress:
    - by the community *A*

— some evaluation by the community *B*
— outsiders' evaluation with results reported to the target community *C*
— outsiders' evaluation *not* reported to target community *D*
— no evaluation *E*

This checklist needs not only initial but also continuous refining in the light of the growing understanding of the concept of community participation and its implications. It should be shared with those formulating and/or submitting project proposals—which means that there must be some common understanding of the conceptual framework of community participation between all those concerned with project formulation and implementation.

There are in addition certain general points to be looked for in assessing projects:

- Does the institution move out into the villages instead of expecting people to come to it?
- Is the project working with primary institutions?
- Has the government given its stamp of approval to agencies at the local level involved in the project?
- Does the project work with women?
- Is there a specific methodology suggested for community involvement?
- Does it include a specific methodology for involving people in monitoring/evaluation?
- Does an infrastructure exist for an exchange of information at the local level?
- Is there an acknowledgement of possible conflict areas by the project?

(From: UNICEF, Assignment Children 59/60 (February 1983) pp. 133-135.)

HELPING THE PEOPLE TO ORGANIZE

Now that you have some basic information about the community, the next step is to broaden your contact with the leaders of the community. Involve the local leaders as soon as possible in the project. Who are the leaders? Why are they important? How do you find them? What can they do to help?

Who are the leaders?

Anyone in the community may be a leader. A person is a leader when his or her ideas or actions influence others or he/she helps to get things done that the people want done. He/she is accepted by the people as a person of wisdom and sound judgement and one whose advice has been valuable in the past. He/she might be wealthy and powerful, or a person known to be very religious. Different people may be leaders in different areas such as agriculture, religion, politics or health. The leaders you are interested in should have some influence over people's actions which are related to their health.

Why are leaders important?

Community leaders usually make decisions that result in success or failure of a project. They are trusted and the people of the community will work with them more quickly than with you. If this is to be the community's program you must count on community leaders to take some responsibility for its success. You are the spark plug and the source of assistance. You can help bring together the other resources needed for improved community health. But the project will not be a success unless members of the community participate; their participation is usually decided by community leaders. The people to work with are those respected by the community and who are willing to learn and work.

Two kinds of local leaders

1. *Formal leaders:* Are generally paid for what they do. Projects sometimes fail or move slowly because these people were overlooked during the planning stage. Consult them often and request their advice and assistance. Gain their cooperation. Examples of formal leaders are:

    - Political appointees (mayor, party representatives)
    - Government officials (police, national guard)
    - Village chief
    - Religious leaders
    - School teachers
    - Heads of organizations

2. *Informal leaders:* May receive no money for what they do and have no official authority. They come from the local community and often have more influence than formal leaders. They are not necessarily the persons with the best houses or the best pieces of land, but they are liked, trusted and respected by their neighbors and are willing to help. A woman may be a leader in respect to the need for a better water supply while her neighbor may mainly influence vegetable gardening.

How do you discover the informal leaders?

The first step is to consider the responses you received when asking villagers "Where would you go for help if you have a health problem?" Other questions you might use are:

> "Who are the important people in the community?"
>
> "Whose opinion do you respect?"
>
> "Whose advice do you follow?"
>
> "Who is wise?"
>
> "Who settles arguments within or between families?"
>
> "Whom do you think people would go to for advice when their children have fever? To organize a special trip or event?"

You will probably find that the people named are those with leadership qualities and that the named will differ according to the problem to be solved.

However, leaders may not be the persons who show the greatest interest at the beginning of a project.

You may not uncover obvious enthusiasm to help others, but people who express interest, friendliness, and willingness to work, or peole whose name was mentioned often by neighbors, may be your key to potential leaders. In your quest to discover local leaders, do not bypass those who appear to be against your work. Give them special attention and try to win their support and cooperation.

Example of a local leader: the birth attendant

Birth attendants are the most widely distributed of any category of health-related person. The reason for this is that women usually wish some assistance at the time of delivery and they are unable to travel far or to wait long for some one to reach them when they go into labor. The birth attendant is also working at a time which is especially appropriate for maternal and child health education. Unfortunately, birth attendants are often untrained, but they are often very influential with mothers.

Identifying and working with local birth attendants can be very effective in health education. In fact, in some poor communities the entire standard of health, sanitation, infant and childhood death rates and family planning have been revolutionized primarily through the work of birth attendants.

What can leaders do for the community?

If an effort is made to give leaders a thorough understanding of how health problems affect community well-being and how these problems can be solved, they can contribute immeasurably to better understanding among the people. They can also become a powerful motivating force for community unity and action. Through their own acceptance of improved health methods and practices, they become a motivating force for change.

But, care must be used when deciding which leaders are the influential ones related to the specific community problem. In Tonga, an enviornmental sanitation project was initiated after preliminary planning with the community leaders. In Tongan society the women rank higher than the men according to traditional Tongan Kinship systems; the men however, are the heads of the households. The organization of the project was based on the men's support, and, at the request of the men, the women were not involved in the planning. The health workers left the decisions about methods of work to the male leaders but conducted the evaluation themselves. The project failed.

When a second project was planned in another Tongan community, an analysis was made of why the first one failed. The conclusion was that both the male and female leaders should have been involved. Both groups were given full control of the activities under guidance of the health worker. The villagers were left to themselves to make the decisions and suggestions supported by the majority were encouraged and used. Evaluation of the second project showed that every goal was achieved.[1]

Project success can be achieved through the efforts of the villagers themselves, providing the right approach is used in promoting the active participation of the most influential community groups and leaders.

Here are some other ways leaders can contribute to the success of a project:

1. Bring people to meetings.
2. Arrange for and find meeting places.
3. Help reach more people by telling others.
4. Help people in the community know you and gain confidence in you.
5. Give general information about the program and help interpret it to the people.
6. Help identify problems and resources in the community.
7. Help plan and organize programs and community activities.
8. Help plan and organize any services which might be provided.

1/ Fanamanu, Joe and Tupou, Vaipulu. "Working through the Community Leaders, An Experience in Tonga." *International Journal of Health Education.* July-September, 1966.

9. Give simple demonstrations.
10. Conduct meetings.
11. Lead youth groups and various individual projects.
12. Interest others in becoming leaders.
13. Help neighbors learn skills
14. Share information with neighbors.
15. Serve as an officer in an organization or chairman of a committee.[1]

How can these potential resources of the community be mobilized? In discussions with leaders, what have you discovered that is important to them? Maybe it is the protection of children's health. Maybe it is convenience, privacy, or cleanliness? Maybe they are moved by competition—"Other communities are solving their health problems." They might express pride in their community—"We have done so many other things in this village, but this problem remains." Capitalize on these motivations. Use them to guide you towards a better understanding of the people of the community.

(From: Community Health Education in Developing Countries, pp. 13-16.)

WAYS TO INVOLVE WOMEN IN HEALTH PROJECTS

- Asking, listening and observing to identify women's needs.
- Identifying women's roles, opportunities and problems.
- Identifying cultural, social, family and other patterns which affect women postively and negatively.
- Getting womens' help in assessing the potential positive and negative effects of projects on women and children, particularly the likelihood of access to project benefits.
- Involving women in the decision-making aspects of project planning, implementation and evaluation. Encourage participation of women in village meetings when development projects are discussed; if socially unacceptable for women to attend with men hold meetings for women to discuss development project.
- Identifying, training and working with women leaders and supportive men.
- Identifying and using local organizations traditionally supportive of women.
- Training and encouraging women counterparts to act as communication channels for information and resources generally controlled by men.
- Providing training and other programs or activities to improve the quality of life of rural women in traditional roles, (such as increasing status, income, income generating activities, social rewards).
- Helping government, other developers and community people understand and support the important role women can play in development.
- Sharing information and analyzing failures and successes of projects directed to women's needs.

(Adapted from Small Scale Beekeeping (Peace Corps) Session 31,page 217)

FACTORS AFFECTING PARTICIPATION IN RURAL DEVELOPMENT PROJECTS

FACTORS:	EXAMPLES OF EFFECTS
Physical and Biological Climate, weather fluctuation, rainfall; soil fertility, water elevation; terrain, vegetation patterns; insect and animal pests population size relative to land resources	Long rainy season may make it impossible to bring children for immunizations because roads and paths are impassable; poor soil fertility for upland farmers may mean they must work enough harder than lowland farmers that they have no time for participating in health projects.
Economic Land tenure and ownership patterns; agricultural production patterns; crop and livestock resources; income and expenditure levels; savings, investment and credit; employment possibilities; level of industrial development; markets and transport; roads and communications.	The poorest people most in need of the benefits of health projects, are likely to have the least time and opportunity to participate. Most of their energy goes into survival.
Political Centralized vs. decentralized structure of government; competitive vs. single party system; tradition of local government or none; linkages if any of central elites to rural areas and problems; prevailing ideology; orientation toward participation by rural people	Local government units more an extension of central government authority than representative of local population will lack tradition of their exercising local authority; national center that gives only superficial suport to rural development goals and fears any grassroots mobilization may inhibit participatory organization.

Social Settlement patterns, nuclear vs. extendedfamily structure; clan, ethnic or voluntary association memberships; caste or race division; social stratification and class; cumulative vs. cross-cutting social cleavages; local institutions for conflict resolution rural-urban differences; patterns of migration.	Farmers live in isolated homesteads which make organizing health projects poverty, tenancy and ethnicity make it difficult to develop projects not controlled by wealthy, landed and dominant groups
Cultural Values relating to place of agriculture in people's lives; sex roles and division of labor; orientation toward future and toward change; attitudes toward group activity and cooperation patterns of political andsocial deference; attitudes toward role of women in local and national society.	In certain communities, males will not let women leave house compounds, let alone attend a health education session at the health post; general attitude of family loyalty and inter-family competition inhibits cooperation on health projects. Norm of consensus goes against "democratic" majority voting that might defeat" the landowner.
Past Project Experience Past relationships between this area and the national center(cooperative or hostile); traditional rivalries between towns within area; past experience with central government initiatives for rural development;	Prior experience with a project whose rice seeds failed to germinate makes it difficult to get new practice; history of embezzlement of self-help funds raised by community leads many local people to distrust new health community efforts.

(Adapted from Cohen and Uphoff. pp. 148-9)

MOTIVATING THE COMMUNITY: AN IMMUNIZATION EXAMPLE

The need for cooperation

* For your immunization programme to succeed, you need people to co-operate. It also makes your own work more interesting and pleasant.

* Busy mothers must take time and make the effort to come to your immunization session. They may have to walk a long way, or pay for transport. They have to remember when to come again.

* You need people to co-operate if you are to arrange an outreach session. You need help from the community to find an immunization site, and to borrow furniture. And you may need help during the session itself - for example, to register and to weigh children. You need help to encourage and remind mothers to attend.

* People will co-operate to make the programme succeed if THEY WANT the immunizations. They will not co-operate very well if they only accept immunizations because YOU want them to. They need to feel that their children's health is THEIR responsibility. You are there to help them to have something that they want and value.

* So, first you have to make the community want the immunization programme. That is, you must motivate or move the people.

What makes people WANT immunization ?

- they must want their children to be more healthy.
- they must know about immunizations.
- they must believe that vaccines prevent sickness and make children more healthy.

But, even if people want the programme, they will not co-operate if it is difficult or unpleasant.

What makes people COME to an immunization session ?

- they want immunizations for their children.
- it is easy for them to come.
- it is a pleasant experience.

MAKE IT EASY for people to attend.

Arrange outreach sessions at a time and place that is convenient for as many people as possible. Hold sessions at the same place at the same time on the same day of the month. Then it is easier for people to remember to come.

MAKE IT PLEASANT for people to come.

Be polite and friendly; make waiting areas as comfortable as you can.

How can you make people in a community WANT your immunization programme ?

FIRST - FIND THE PEOPLE IN THE COMMUNITY WHO CAN HELP

political leaders
community leaders
government staff
extension workers
women's groups
community health workers
traditional healers
traditional birth attendants
school teachers
religious leaders

Each community is different. You must find the right people in your community.

Explain to them about the dangers of the target diseases: and about vaccines and prevention.

Explain about your immunization programme, and what you are trying to do.

Ask for their advice about how to motivate the people in the community.

Ask their advice about the opposition and any problems that there might be.

Ask for their help to explain the programme to the community.

Ask for their help to arrange sessions that are easy for mothers in that area to attend, for example, on the local market day.

Ask them to encourage people to come to the session.

Of course, the immunization team are people too ! You cannot do everything ! So make sure that the sessions are possible for you as well.

SECOND - MAKE THAT COMMUNITY'S EXPERIENCE OF IMMUNIZATION A GOOD ONE

People's experience of your sessions will have a big effect on their motivation.

Be reliable, punctual, polite and friendly.

Look after your vaccines carefully so that they work.

Give the community some feedback. Tell people the results of your work; how many children you have immunized; whether there are less sick children in the district.

(From: WHO, "Health Education in an Immunization Program" Immunization in Practice: A Guide for Health Workers Who Give Vaccines pp. 2, 4)

One major objective of the primary health care approach is to help individuals and communities become self-reliant in dealing with health problems and to raise the effectiveness of the lay contribution to health. This objective calls for a people-oriented health technology that meets people's needs and aspirations... and is of relevance to their social and cultural background.[1]

The village nutrition action programme in Thailand

its new health education approach

by Amorn Nondasuta

For many years it has been recognized that malnutrition is a major problem affecting the life and well-being of the people in Thailand. Its persistence, in spite of a favourable aggregate balance of food supply within the country, is related to the complex interaction of many factors, including local food availability, knowledge, beliefs, and purchasing power. Previous intervention programmes, in a top-down approach to the provision of services, have not had a satisfactory impact.

Mothers were unaware

In 1980 the Nutrition Division at the Ministry of Public Health found out, through a nationwide nutrition surveillance programme, that over 50% of pre-school children were malnourished by Thai standards. Mothers, it was discovered, were unaware of the role of food during pregnancy and lactation and did not realize the importance of proper infant feeding and food supplements.

Health problems were most severe among infants and pre-school children in rural areas and in Bangkok neighbourhoods with a high population concentration. In rural Thailand, low birth weights and infant malnutrition were the outcome of inadequate nutrient intake related to poverty and high incidence of parasitic and other infections, as well as of poor feeding practices. Pregnant women resisted increased intake fearing difficult deliveries. Weaning children received mashed or masticated rice and bananas, inadequate in calories and protein requirements.

In the past, government efforts to alleviate these problems have relied heavily on supplementary feeding,

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using processed foods distributed nationally from Bangkok. Limited budget restricted feeding programmes to more severely malnourished children, giving activities a strong curative bias. In rural areas, modification of food habits to prevent malnutrition was made even more difficult by the limited availability of convenient and nutritionally appropriate weaning foods. And last but not the least of problems was the inadequate involvement of the community and the inadequate structural support for village activities.

Focus on innovative approaches

The Village Nutrition Action Programme is a combination of village activities and governement services designed to reduce the incidence and prevalence of malnutrition among target groups of the population including infants, pre-school children and mothers in rural areas.

The programme focusses on innovative efforts in the prevention and control of malnutrition through the primary health care approach. It has three main objectives:

— involving village health volunteers, mothers, farmers, teachers and others in nutrition education and surveillance activities;

— promoting the use and sale of locally produced food supplements of good quality; and

— developing a self-managed and financed village fund to sustain and expand local nutrition and other development activities.

One year after the national programme had been operating, 1.2 million infants and pre-school children — i.e. 18% of an estimated total of 6.6 million — had already been weighed regularly for malnutrition identification.

The Minister of Health presented an award to the villager volunteer who weighed the one millionth child as part of a national campaign to give moral support to the participation of village volunteers in the programme.

The educational approach used is innovative, at least in the Thai context, and may be instructive in two respects:

— the development of lay resources in such PHC programme components as nutrition;

— the role of health education in promoting individual and community skills for the protection, maintenance and improvement of health.

What follows then, will not be a comprehensive programme history, description, analysis or evaluation, but only an assessment of innovative aspects and of the significance of health education in helping people become more self-reliant in improving their nutritional status.

The preconditions: many positive factors

Before describing the health education aspects of the Village Nutrition Action Programme, the preconditions which exist in Thailand should be mentioned. In the first place, the policy stage has been set. Training in nutrition planning has been introduced in the National Economic and Social Development Board, many policy problems and conflicts have been worked out between the agriculture and health sectors, and joint planning and priority setting have been improved at all levels. Secondly, surveys and demonstration

Photo WHO/Jack Ling

The village chief (centre) at Dankrongkrang — a community with a population of 1007 and 193 homes — meets with the local health team comprised of a traditional birth attendant, a sanitarian-assistant district health officer, and a village health communicator (at right), one of 17 front-line volunteers who work in the community. In the background, earthenware jars for water storage.

projects undertaken by various institutions have provided identification of the most vulnerable areas and target groups, as well as a model for practical community-based and intersectoral nutrition action at village level. Thirdly, the Ministry of Public Health has been able during the 4th Five Year Plan (1977-81) to set a primary health care system in motion, with trained village volunteers and a supervision system, in almost half of the villages in Thailand (approximately 22,000 villages).

Practical lessons have also been learned over a number of years of experience with village child nutrition centres, indicating the need to develop new approaches to educating and involving the mothers themselves in solving problems related to a dependable, acceptable, and economic provision of food supplements.

Finally, the areas for initiation of the programme were carefully selected on the basis of three key criteria:

— potential for achieving village nutritional self-sufficiency;

— presence of interested and capable provincial health officials; and

— promising opportunity for effective decentralized programme administration.

The phase preparatory to village action involves orientation and training or refresher training of workers in all the sectors concerned, together with community leaders from provincial to village level and the procurement of necessary supplies for initial development. The training approach is one of integrated training and action (competency-based).

At the village level, a basic principle is that the villagers must identify the problem themselves. Initially, this requires the effective functioning of the village health volunteers and communicators (VHC) in introducing a clear action programme model. This model implies that they learn about the problems and concerns which motivate mothers to "do something" and that they work out solutions with the mothers.

The required number of VHCs is selected among those already in place. Then they undergo special training to the midwife level of proficiency in weighing, recording, and interpreting the weight and growth charts of the chidlren under five years of age.

Involving mothers in monitoring activities

VHCs are expected to involve the mothers in these monitoring activities: the principle followed is that the mothers must be encouraged to learn to use the chart themselves. The value of continuous monitoring of weight gain and of making it possible for the mothers to be responsible for keeping the record has been demonstrated. The weight chart has proven to be a *unique medium* for health education when employed appropriately; it has become an integral part of the village nutrition action programme and serves both as an educational tool and as a monitoring and surveillance instrument.

The mutual aid approach strengthens behaviour change

The programme also involves the institution of monthly weighing in the village, leading to the formation of a kind of mutual aid group among the mothers. The purpose is to provide supplementary food according to the needs identified. This approach entails a social learning process in which mothers, village health volunteers, and officers from various social sectors are involved in food selection and evaluation, preparation and production.

The establishment of these mothers' mutual aid groups has been found to facilitate the introduction and adoption of new nutrition practices. The process passes through five critical steps: awareness, promotion, decision, trial and acceptance.

In addition to the conventional efforts in creating awareness and promoting change in nutrition behaviour, a new dimension has been added by placing great emphasis on innovative approaches to stimulate and encourage a real desire, and a genuine decision on the part of mothers, to join the group and participate in the action programme. Use of the growth chart has been supplemented by new incentives to foster appropriate attitudes and skills. These include: the self-maintenance of the new behaviour; practical demonstrations of good results in the use of food supplements; the fact that these supplements, apart from their value in terms of local production and consumption, can also be sold for profit; seven recipes tested for quality and acceptability; the inroduction of simple equipment and production processes.

The prospect of future economic benefit has been found effective in motivating mothers to join.

Subsequently, a technique to test change and strengthen acceptance is introduced. Once or twice a week the mutual aid group of mothers meets for a kind of party and mid-day meal. Every mother in the village is invited to take her child or children along and to bring a cup of rice: thus, all can share in a free lunch, including food supplements added to a normal dish. The growth charts are checked.

In this way the desired change is linked to previously acceptable behaviour and, in time, the cultural mores may move in a new, positive direction.

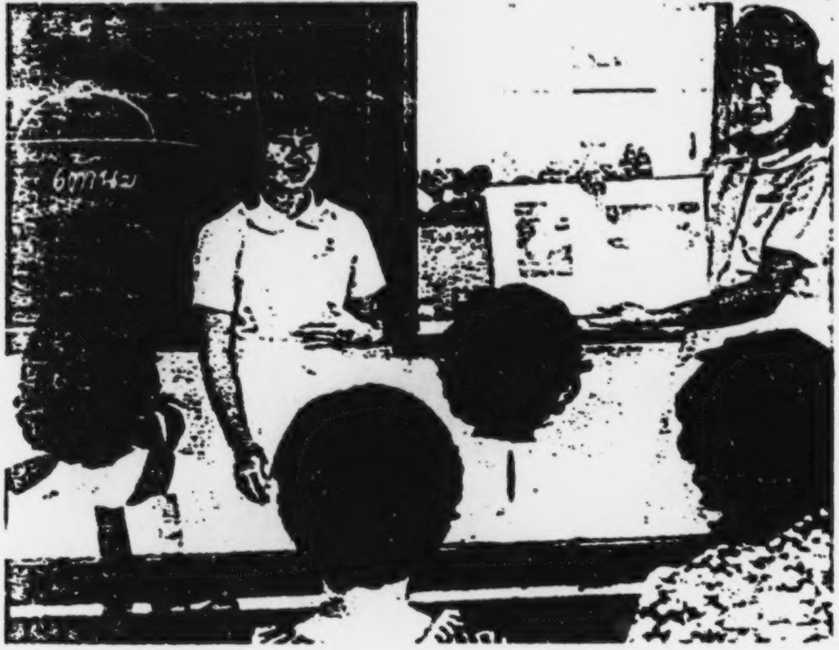
In the maintenance phase, a self-managed community fund

The five steps from awareness to acceptance lead to a final one: the establishment of a self-sustaining and managed fund for further nutrition improvement based on the local production and sale of supplementary food packages. These are comprised of simple mixtures — basically rice, mung or soy beans, or ground nuts and sesame seeds.

It is being demonstrated that a sound policy is to *give* these supplements free to third or second degree malnourished children, and to *sell* them to the families of first degree or normal children as well as to other nearby villages. The income is then managed by the village for self sustained programmes.

A health education session in a provincial hospital on breastfeeding. About 50% of the mothers use the infant growth chart which has proved to be a very effective health education medium.

Photo WHO / Jack Ling



An entry point into the process of development

The Village Nutrition Action Programme involves interactions with many sectors and levels of the government and the communities and there are still many factors to be tested, improved and fully operationalized.

Some novel educational lessons stand out. For example, one message is clear: it is not enough to rely on education for its own sake, education must be related to a specific action programme. Another obvious lesson is that such a programme cannot function in isolation: by its very nature it is intersectoral and multilevel, and requires innovative approaches to integrated learning and action involving both government and community.

We have also learned that new approaches must be found to increase the resource base at the village level and strengthen capability for self-management. Only then will we achieve sustained development and self-reliance.

The nutrition problem is a highly complex one in which an innovative educational process of learning and acquiring new skills and attitudes is required. Adjustments in the system must also be introduced to achieve behavioural change which can be sustained economically and socially.

Therefore such an action programme becomes an entry point into the whole complex fabric of the development process, with its social, economic and political components. Many details of this process have not been explored here. The programme has been described in general, as a background to the innovative health education approaches which have played a critical role in the present stage of progress.

This article is based on a paper presented by Dr Amorn Nondasuta at the meeting of the Expert Committee on New Approaches to Health Education in Primary Health Care, held in Geneva 12-18 October 1982.

(From: WHO. Education for All (Newsletter) p.21-26.)

EXAMPLES OF PROBLEM SITUATIONS

Adapt the following example situations to fit the problems most encountered in the host country.

1. The Ministry of Health's goal is to reduce deaths from malaria. The new health Volunteer is expected to contribute to this program. The local community group isnot interested in the problem of malaria, which is not as serious as other diseases plaguing the community. The primary goal of the local organizations in the community is income generation. What should the volunteer do?

2. The local traditional healer is highly respected and deared by members of the community. Health workers in the past have treated her disrespectfully, referring to her as a "dangerous quack." As a result, she has discouraged families from immunizing their children, saying it will poison them. Many of her herbal cures are effective. Many local children get sick and die from diseases that could be prevented by immunization. What should the new Volunteer do in this situation?

3. Community elites have dominated decision-making in previous development projects and, as a result have gained the greatest benefits from the projects. The traditional village structure is very hierarchical; all the major decisions are made by the village council which consists of elite males exclusively. The Health Volunteer wants to work with the communittee to develop a water and sanitation project with a strong emphasis on communittee participation and health education, based on needs expressed by many individual farmers. What is the best approach in this situation?

4. Community values emphasize respect and deference to elders, particularly male elders. There is some distrust of people with "too much" foreign education. Because there is much work to be done on the farm and many children die before becomming adults. there is great concern to have as many children as possible even though resources are scarce. The supervisor of the health center has asked the health Volunteer to help motivate village families to space their children but the Volunteer finds that most people do not listen to her seriously because she is young, and she has no children of her own.What should she do?

5. The community recently had a bad experience with a development project intended to increase grain production through new seeds. The seeds were free but they were not well suited to the local soil and the crop yield was very poor. Many people had to sell some of their other crops and goods to buy grain last year. They were not willing to take chances with any government schemes again. The village has no latrines and many problems with intestinal diseases. The Volunteer would like to start a community project to properly construct and use latrines. What is the best approach in this situation?

6. Many children in local communities die each year from dehydration resulting from diarrhea. A very strong traditional health belief is that a baby with diarrhea is "hot" and it will "break" if you give it something "cold" like water. They continue breastfeeding during diarrhea because breast milk is "warm". The community water source is very dirty. Sugar is not available in the community. Salt is available but it is quite expensive and cash is scarce inthe community. The local school teacher and the health Volunteer are concerned about this situation. What can they do?

7. The local community health worker (CHW) feels that the best way to do health education to improve community health practices is to inform people what they should be doing and why that will make them healthier. The main techniques and materials used by this person include: talks during communittee meetings,and in the school,posters in the market and other meeting places and a display in the school which the CHW put up singlehandedly. The health worker is very discouraged because all these efforts have had little impact on community health practices. The CHW has asked the Volunteer to make an attractive visual aid for the next talk so it will be more effective. What can the Volunteer do to help the CHW?

Session 15

ORGANIZING A HEALTH COMMITTEE

TOTAL TIME 2 hours, 45 minutes

OVERVIEW One viable way to involve the community in health projects is through establishing health committees. Community health committees serve as a means of promoting community responsibility for meeting local health needs. The presence of a health committee also diminishes the potential for the PCV to be placed in a primary position of decision-making. During this session, participants use a case study to examine the organization, function and operation of health committees. After thoroughly discussing how to establish such a committee, the group practices conducting an effective meeting of committee members.

OBJECTIVES

- To describe the functions of a health committee in promoting primary health care in the community.
(Steps 1-4)
- To outline the process of establishing a health committee and discuss potential problems which may impede that process.
(Steps 3-5)
- To describe the role of the Peace Corps health worker in relation to the committee.
(Step 5)
- To practice conducting a meeting using a structured meeting format.
(Steps 5 and 6)

RESOURCES

Helping Health Workers Learn, Chapter 10, pp. 1-5.

Handouts:

- 15A The Village Health Committee
- 15B Steps for Setting Up A Health Committee
- 15C Role of the PCV in the Community Health Committee
- 15D Meetings
- 15E Four Roles for Structured Meetings

MATERIALS

Newsprint, markers

PROCEDURE

Trainer Note

Before the session, find out as much as you can about health committees which may already be established and functioning in the host country. If none exist or the approach is still very new, try to gather information regarding the potential for developing community health committees. Elicit perspectives from community members, clinic staff, and second-year Volunteers on the functions of such a committee, the PCV's role in relation to the group, and culturally acceptable procedures for conducting meetings and making decisions which will affect the community.

Step 1
(10 min)

Health Committees Back Home

Review the session objectives and draw a link between what participants learned in Session 14 on community organization and the more specific focus here on health committees. Stimulate a discussion by asking participants about their previous experience working with health committees. Ask the group:

- Has anyone had experience working with a health committee in the U.S.?
- Briefly, what was the purpose of the committee and how did it operate?
- Do you think the same type of committee structure could be transplanted to your host country and work well?

- What purpose could health committees serve in developing countries?

Explain to the group that they will use a case study to investigate the purpose and operation of health committees and assess the potential for such committees in the communities where they will be working and living as PCVs.

Step 2
(10 min)

Case Study Instructions

Divide participants into small groups and distribute copies of Handout 15A (The Village Health Committee). Ask participants to read the article individually, then join members of their group to critique the case. Assign the small groups the following task:

1. Prepare a list of positive and negative aspects of the project illustrated in the case study, focusing specifically on the following: (posted on newsprint)
    - reasons for establishing the health committee,
    - selection of committee members,
    - priority problems addressed and activities undertaken,
    - resources available to support the committee,
    - the teaching program for the committee,
    - operational phases/aspects of the project,
    - problems encountered,
    - evaluation criteria used.
2. Decide whether or not a health committee is a viable community organization approach for the communities and programs in which you will be living and working. If you decide it is not, be prepared to discuss why. If you decide the committee is a viable approach list and describe at least five of its potential functions.

Tell participants they have 25 minutes to complete the work.

Step 3
(25 min)

Small Group Work With Case Study

Have the small groups carry out the case study assignment.

Trainer Note

You might suggest that each small group elect a discussion leader, recorder, and timekeeper to help facilitate the task work. Visit the groups to make sure they are on track and answer any questions they may have.

Step 4 (30 min) **Establishing the Purpose and Functions of the Health Committee**

Have the small groups present their critiques of the case study and explain their position on the viability and function of a health committee in relation to their future sites and work assignments.

As the groups report out, have someone make a master list of all of the committee functions mentioned. At the end, help the group select the five to seven major functions on the list.

Trainer Note

Major functions of a Health Committee may include:

- identifying and analyzing community health problems and formulating plans to solve them;
- mobilizing community resources (manpower, materials, etc.) to meet health needs;
- generating community support for and active involvement in activities aimed at health improvement;
- motivating community members to take responsibility for their own health and help make decisions affecting their well-being;
- planning, organizing, monitoring, and evaluating community health projects/activities;
- planning/organizing activities to generate income for funding local health projects;
- forging collaboration with the national health services and development agencies to secure needed resources;
- supporting and supervising the community health worker.

Step 5
(20 min)

Setting Up the Committee - Defining Roles and Trouble-Shooting Problems

Distribute and have participants look over Handout 15B (Steps for Setting Up A Health Committee) and 15C (Role of the PCV in the Community Health Committee). Ask the group to modify the information so that it fits their communities' situations and needs.

When participants are satisfied with the information on committee set-up and the Volunteer's role as a committee member, ask them to consider problems which may occur that would impede or inhibit the process of establishing an effective health committee. To do this, quickly divide the group in half. Ask participants on the right side of the room to present a potential problem to participants on the left side; have the left side suggest a possible solution to the problem, then pose another potential problem to the group on the right. Proceed back and forth until the most important issues have been treated.

Trainer Note

Be sure the discussion here is community and program-specific. Include in the discussion any pertinent information you may have on health committees which are already in place and functioning in the host country. If political (or other) problems prevent the formation of health committees in some of the communities where Trainees will be living, help the group identify alternative approaches that may be taken.

Step 6
(15 min)

Conducting Effective Meetings

Introduce this step by explaining that the success of a health committee is largely determined by how well it can conduct its meetings. Ask participants to think of the last time they attended a meeting and comment on why it was successful or unsuccessful. Ask the group:

- What did the leaders do to make the meeting run smoothly?
- In what different ways did the group make decisions?
- What happened when people were not happy with the decisions?

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Distribute Handout 15D (Meetings) and Handout 15E (Four Roles for Structured Meetings) and have the group review them briefly. Ask participants to use the handout information along with their understanding of the local culture and discuss appropriate meeting formats to use in their communities. As the group identifies key points for conducting meetings in the host culture, write them on newsprint in a logical order.

Trainer Note

If Handouts 15D and 15E are not very relevant to the culture or the needs of your group, don't use them. Rather, develop a culture/program-specific handout that outlines an effective procedure or format for conducting meetings at a community level. Ask a host country staff member to help you do this and invite him or her to attend this session and serve as a resource on cultural appropriateness.

Step 7
(40 min)

Holding a Short Meeting

Ask the group to participate in a short meeting using the format and ideas generated in Step 6. Present them with several agenda items that are relevant to either the current training program or a future project (see Trainer Note below). Ask participants to select the meeting leader and any other roles and begin the meeting by deciding which of the agenda items they want to address. Assign the group a time limit of 20 minutes. If the group is larger than 12 participants, divide them in half and conduct two simultaneous meetings.

After the meeting(s) is over, ask the group to reflect on the process and comment on:

- How smoothly the meeting went
- What the leaders and other key members did or didn't do to facilitate the meeting
- How even the participation was among the group members
- How well the decision-making process went
- How a "real" community meeting would differ from this one.

Close the session by suggesting to participants that they look for opportunities to practice conducting structured meetings during the remainder of their training. Also suggest that they try to attend at least one meeting of some group in the local community to observe formalities, traditional ways decisions are made, and other aspects of meeting protocol in the host culture.

Trainer Note

Agenda items for the short meeting can be anything that the group would consider relevant and in need of discussion. You can suggest items relevant to their immediate situation in training. Examples include:

- deciding on a date for the next social or sports function at the training center;
- planning the logistics for an up-coming visit to a clinic in a nearby province;
- discussing what to do with peers who habitually arrive late to sessions.

Or you may suggest issues that relate more specifically to the participants future work assignments. Some examples are:

- planning ways to promote a new under-fives clinic to increase attendance by local mothers and their children.
- deciding what to do with the bulk food donations (flour, oil, powdered milk, etc.) received by the clinic from international organizations.
- discussing ideas for how to raise money to pay for a community health worker who will work in outlying villages.

The idea with this short activity is to give participants a chance to try a structured approach to a meeting. The content of the meeting should be relevant for the group but not the primary focus of the step. The process of the meeting is the main point to emphasize.

The Village Health Committee

— A case study of community participation from Sierra Leone

by
David A. Ross

INTRODUCTION

There is a growing awareness of how important it is to involve the people of the community in their own primary health care, both in developed and developing countries. At the same time, there is increasing interest in securing objective means to evaluate the results of these programmes, both through the establishment of adequate baseline information and through making evaluation an integral part of each new programme from its initiation. In the project reported here, the major aim has been to decrease the prevalence of disease by motivating the people to adopt practices which promote health. This is carried out through the work of the village health committee, a group of people selected by the villagers themselves, a group which includes all those in the village involved with the health effort. This is an inexpensive, non-disruptive method of health promotion which encourages self-reliance rather than dependence on outside technology. We believe that this approach is adaptable to other rural health programmes, if local needs are taken into account.

THE COMMUNITY

The project is based on a 125-bed church hospital in Serabu, a village of 2500 people in the Southern Province of Sierra Leone near the coast of West Africa. The population density of the local area is 30.5 per square kilometre. Nearly all the local people belong to the Mende tribe.

Generally, this is a poor, rural, farming community in an area of high infant and child mortality, with a large proportion of the population too young to act as producers. (See Table 1 for demographic figures and comparisons with other areas). The climate is tropical with an annual rainfall of 120 inches (305 cm).

TABLE 1

COMPARATIVE VITAL AND ECONOMIC STATISTICS

Country	Population density in 1975 (persons per km²)	Crude birth rate (births per 1000 pop. per annum)	Crude death rate (deaths per 1000 pop. per annum)	Infant mortality rate (deaths under one year old per 1000 live births)	Expectation of life at birth (years)		Prop. of urban pop. under five years (%)	Prop. of urban pop. under 15 years (%)	Prop. of urban pop. over 65 years (%)	Gross[3] nat. product per capita (1973) US dollars
					Male	Female				
SIERRA LEONE	30[1]	44.7	20.7	>200[2]	41.9	45.1	17.3[1]	36.7[1]	5.1[1]	162
INDIA	182	34.6	15.5	122	41.9	40.6	14.7	40.1	3.2	117
CHILE	14	26.0	8.7	77.8	60.5	66.0	12.2	35.7	5.1	777
NETHERLANDS	334	13.0	8.3	10.6	71.2	77.2	8.0	25.9	6.9	4440

Notes: [1] Data from Sierra Leone Census (1963) for total population of Sierra Leone.
[2] Data from Wilkinson (1965) and Dow and Benjamin (1975).
[3] Data from UNCTAD Handbook (1976).
All other data are most recently available estimates in Demographic Yearbook (1975).

The staple foods are rice and green vegetables, though cassava *(Manihot esculenta)*, dried fish, chicken and wild animals are occasionally eaten when available. Coffee is the major cash crop, and recently its importance has increased considerably due to the sudden increase in world prices.

MEDICAL FACILITIES

Serabu Hospital is the only static health facility within ten miles of the villages concerned, and the next hospital is in Bo, 56 kilometres away. Between 1966 and 1976, the hospital operated a mobile clinic of the standard maternal and child health pattern, at first serving villages within a 25-kilometre range and later to more distant communities. However, a number of problems both with this clinic effort and in the hospital itself caused the approach to be re-examined. Since the hospital receives less than 20% of its budget from outside sources, fees were charged in the rural work as well as in the various services of the hospital itself. The mobile clinic programme was terminated because, first, the staff could not see any fundamental changes in the health of the people they were serving, and second, the enormous increase in the cost of petrol, vehicle maintenance, drugs and salaries outpaced the resources of the community. And in the hospital, it became apparent that the local poor farmers and their families tended to stay away until or unless the illness was very serious, by which time it was often too late for them to be cured. Even more worryingly, many local patients treated at the hospital returned with the same complaint. This was commonest for diseases such as hookworm and other intestinal parasites, child malnutrition and tuberculosis, since conditions in the community permitted a re-appearance of the disease when the patient returned home. Since these impressions were based on the very small proportion who did seek medical attention at the hospital, one might speculate that conditions were even worse for those who did not. There was abundant reason, therefore, to look for a new approach. Some means had to be found to assist in the development of a primary health care programme in the villages themselves.

PHASE 1: PLANNING

After much thoughtful preparation, the initial step towards the project was taken in August 1975. A sample survey of seven villages within 8 kilometres of Serabu was conducted using a questionnaire This attempted to determine the local morbidity and mortality patterns and the effect each disease caused in the sufferer. It was found that more than half the morbidity and three quarters of the mortality were due to diseases preventable by improved hygiene, sanitation or immunization and treatable by inexpensive means (e.g. malaria, measles, neonatal tetanus, intestinal infections etc.). The data summarized in Table 2 confirmed our suspicion that people were using the hospital only as a last resort when other less "foreign" and more easily available treatments had failed. Similarly, only 18% of the 197 people reported to have died during the previous twelve months had attended hospital prior to their death.

TABLE 2

FIRST ACTION TAKEN WHEN ILL

(August 1974-July 1975)

Action	Proportion of sample (%)
Purchase "drugs" from local trader	36
Take herbal medicines	35
Take no action whatsoever	10
Visit a mobile clinic	9
Go to hospital	8
Visit the fortune-teller	2
Total sample size	669 people

Using these results and the experience of various long-serving members of staff, a plan was conceived. The method chosen involves the exchange of ideas between hospital staff and villagers rather than the institution of a new treatment system such as mobile clinics or training of health promoters, etc. Every attempt was to be made to involve traditional health personnel. It was proposed that hospital staff should meet at least once a month with a health committee selected from their own people by each village to discuss methods of improving their village's health by disease prevention. The committee would be responsible for executing the decisions reached with the help of the other villagers.

PHASE 2: INTRODUCING THE SCHEME IN ONE VILLAGE

In December 1975, this scheme was suggested to the people of Blama at a meeting of all the villagers. Blama is a relatively inaccessible village of 120 people, seven kilometres from Serabu by bush path. It was selected because it was small, had been included in the preliminary survey and because its isolation had prevented its receiving medical help before. The villagers agreed to join the scheme and were left to select a committee and notify the hospital. The only guidelines given were:

a. all members of the committee should be senior, respected people;

b. the committee should include

   i a chairman: the village chief or his assistant;

   ii a person for medicines and care of the adults, who should have knowledge of "medicines", be they traditional or "Western";

   iii a person for water and sanitation; preferably the person appointed traditionally by every village to ensure that weeds do not overgrow the paths and water-collecting sites in and around the village;

   iv all the villages' traditional midwives. These are elderly, senior members of the women's secret society (the "Bundu Sande");

   v a woman with healthy children of her own for the care of the children;

   vi a literate person to act as clerk.

Later, these same guidelines were given to the other villages involved with the project. Only one individual has proved unsatisfactory in any way, and he was replaced by the village concerned of their own volition. The advantages of the villages choosing their own committee are that it makes the village, and not the hospital, responsible for the committee, and their acceptance by the village authorities and the people themselves is assured.

Blama's committee was selected by the end of February 1976, and the village was visited either once or twice a month by two nurses from the hospital until November 1976. Discussions with the committee were held during each visit and initial results were encouraging. The committee and village maintained their enthusiasm and demonstrated this by regular attendance at meetings, by building an open, one-roomed house ("barré") to act as a meeting place, and by digging and fencing three rubbish pits within the first six months. Attendance at the hospital's child welfare and antenatal clinics for immunization, treatment and advice increased, and the committee were learning about disease prevention rapidly.

PHASE 3: A PILOT PROJECT FOR EVALUATION

In November 1976, a plan for a pilot project was initiated to evaluate the health committee approach. The number of villages involved was increased to three, the total population to nearly 800 people, and the project was modified to include a system of objective evaluation as an integral part. The two new villages involved, Yengema and Sengima, are located seven and three kilometres from the hospital.

The staff responsibilities for this project rest primarily with one of the hospital nurses who spends one quarter of his time in activities directly related to the project. The rest of his time is spent in regular hospital activites, on the wards and in the child welfare clinic. However, he is available for consultation by any committee member, and can visit a village if this is urgently required during his time on the ward. The plan is that the responsibility for the project will rotate among the hospital's nurses every six to twelve months so that the number of nurses with experience in the village work will grow and there will be a strong link between the village committee and the hospital staff. One of the hospital doctors with a public health background shares continuing overall responsibility.

Since November 1976, there have been frequent though irregular meetings with each committee. The nurse usually walks to the village and spends two days, adapting the meeting times to the fact that most of the committee members are busy farmers. The meetings are informal discussions, and anyone from the village may attend. Their model is the traditional meeting of village elders. They are usually held in the village barre, and their openness reminds the villagers that the committee represents them and allows any grievances to be aired openly. The committee members do not feel dominated by the nurse, which might happen if they were conducted as formal lessons.

Normally, all committee members are present, the exception being those meetings at which pregnancy and delivery are discussed. These topics are restricted to women who are members of the "Bundu Sande". Even for men to overhear discussions of these subjects is taboo, and so two female midwives from the hospital replace the male staff at these particular meetings.

TEACHING PROGRAMME

A teaching programme was prepared and is shown in Table 3. It is flexible, and the order in which subjects are tackled depends on the particular needs of each village.

EVALUATION

The method of evaluation adopted by this project involves the use of objective criteria of changes within the village and the villager's health. Change will be assessed annually by a community "diagnostic" examination and physical examinations of the villagers. We have set various objectives to act as targets for achievement.

1. CHANGES IN THE VILLAGES

a. The committees' knowledge of the topics in the teaching programme (Table 3) is tested annually. This is also done for villagers selected at random. *OBJECTIVE:* Each committee member should be able to summarize all the topics correctly before December 1978, and this performance should then be maintained.

b. Spot checks of sanitary facilities, wells and general village cleanliness are made frequently. *OBJECTIVE:* A steady trend towards higher standards of hygiene.

TABLE 3

THE TEACHING PROGRAMME FOR THE HEALTH COMMITTEES

a. GENERAL

1. Duties of committee members.
2. The hospital records system as it applies to their village.
3. How to refer patients to the hospital.
4. Use of the hospital child welfare clinic.
5. Use of the hospital antenatal clinic.
6. Use of the hospital outpatient department.
7. Locally available expertise (e.g. agricultural advisors, chiefdom sanitation officer).
8. Methods of teaching at village meetings.

b. HYGIENE AND SANITATION

1. Handwashing.
2. A protected water source: the need, possible designs, use and maintenance.
3. Latrines: the need, possible designs, use and maintenance.
4. Refuse disposal pits: the need, possible designs, use and maintenance.
5. The importance of keeping weeds short in the village.
6. Elimination of mosquito breeding sites.
7. Improved techniques of daubing and plastering houses.
8. Family gardens within the village: what to grow, available seeds, etc.
9. Control of domestic animals.
10. Design of a simple sand filter for drinking water.

c. DISEASES

1. Care of wounds.
2. The importance of maintaining traditional child-spacing practices.
3. Cup and spoon feeding of infants (not force-feeding with the hand or use of feeding bottles).
4. The importance of boiling drinking water for infants.
5. Protein foods and their dietary importance.
6. Anaemia: diagnosis, prevention and cure (iron-rich foods, etc.).
7. Hookworm: life-cycle and prevention.
8. Fever: treatment.
9. Tetanus: immunization and early referral to hospital.
10. Tuberculosis: immunization, transmission, the need for long-term treatment.
11. Diarrhoea: causes, prevention and treatment at home.
12. Constipation: causes and treatment.
13. Cough: treatment at home.
14. Snake bite: first aid.

c. Attendance at, and number of meetings with, each committee is recorded. *OBJECTIVE:* At least 75% attendance. At least three meetings with each committee each month.

d. A map of each village was prepared in January 1977 showing houses, kitchens, latrines, wells, etc. This is being reviewed annually. *OBJECTIVE:* Every villager should have easy access to a latrine and a source of uncontaminated water by December 1979.

e. A register of births and deaths is kept by the clerk of each committee. This is checked annually at the general physical examination of all the villagers. *OBJECTIVE:* A 25% decrease in both the infant and child mortality rates over the first five years, January 1,977-December 1981.

f. Admission and attendance rates at the hospital are kept for the three pilot villages. *OBJECTIVE:* A relative increase in "necessary" attendance rates and a relative decrease in "unnecessary" attendance rates for the pilot villages.

g. The proportion of children and antenatals with a valid clinic card, their degree of immunization, attendance rate at the clinics, and weight progress (children only) will be assessed anually. *OBJECTIVE:* 75% possession of valid antenatal and child-welfare clinic cards within the relevant groups, 75% of those with valid cards having full immunization coverage which, for children, constitutes tuberculosis, smallpox, poliomyelitis, tetanus, whooping cough, diphtheria and measles immunizations and, for antenatals, means tetanus immunization.

2. CHANGES IN HEALTH

A general physical examination of every resident member of the three villages will be conducted annually for at least six years. The first, conducted in December 1976-January 1977, will act as the baseline against which the subsequent examinations' results will be compared. The following information is obtained on each individual: name, sex, date of birth, household and individual number within that household, height, weight, systemic arterial blood pressure, haemoglobin concentration and a microscopic stool examination; a urine specimen is tested by "multistix" (Ames Co.) and, if any abnormality is detected, microscopic examination is done; and the results of a doctor's examination of cardiovascular and respiratory systems, abdomen, teeth, eyes and general appearance is recorded.

RESULTS OF THE BASELINE GENERAL PHYSICAL EXAMINATION DECEMBER 1976-JANUARY 1977

The attendance rate was extremely high, (97,5%) of the 794 villagers involved) and full data were obtained from most of them (93,1%). The results confirmed our suspicions that the people were suffering from a broad spectrum of debilitating conditions.

a. **Population profile.** 37% of the population were under 15 years of age and 16,5% under five years. The sex ratio was 78,3 males per 100 females, probably largely due to the migration of males to the towns for education and employment.

b. **Nutritional status.** Approximate assessments based on height and weight showed that, though the adults were fairly well-nourished, many of the children were well below normal standards. For example, 36,5% of the under-fives fell below the third percentile on the "Road-to-Health Chart" (TALC; see CONTACT No. 18, December 1973).

c. **Systemic arterial blood pressure.** Mean blood pressure by age and sex were very similar to those found in European and American caucasians.

d. **Haemoglobin concentration.** The mean haemoglobin concentration of the population was 9,1 g/100 ml, with 69% of the population having concentrations below 10.0 g/100 ml.

e. **Stool examination.** Parasites were both very common and, when present, very numerous. 75% of the population had at least one species of pathogenic parasite detected in a single stool smear. 53% had hookworm, 26% had ascaris and 3% had other infections including *Entamoeba histolytica, Trichuris trichiura, Giardia lamblia* and *Schistosoma mansoni.*

f. **Urinary tract infections.** These were common. 15,7% of 762 urine specimens had proteinuria, and microscopic examination of 160 specimens showed 35% with five or more white blood cells per high power field, indicating an infection. 5,0% had ova of *Schistosoma haematobium*

Drinking water used to be collected from a pit dug in the stream-bed.

PROGRESS DURING THE FIRST TWELVE MONTHS (NOVEMBER 1976-OCTOBER 1977)

CENSUS: The first task of each committee was to compile a census of all residents by household membership. They proved extremely accurate.

PRIORITIES: In our early discussions with the committees, we asked them what they considered to be the priorities for improved health in their villages. Their answers were:

1. A source of clean drinking water during the dry season;
2. latrines;
3. improved agriculture;
4. better road communications;
5. improved village tidiness.

PROGRESS MADE:

1. **Clean drinking water.** Sengima was the only village to have a well before the project began. Furthermore, its stream had been selected as the source of a piped water scheme which will supply Serabu Hospital, Serabu and Sengima with treated water by late 1978. However, the other two villages needed wells since their streams dry up for at least four months each year

A villager hauls up a bucket of earth during the digging of a well.

and water is taken from pits dug in the stream bed. They agreed to supply everything except the skill needed for well-digging which no villager had.

Two wells were completed in both villages, as well as a demonstration wall and pulley system for an existing well in the hospital grounds and three wells in a neighbouring village. Various designs were developed, but all had a wall and worked on a rope and bucket system.

2. **Latrines.** Blama had no latrines in December 1976, Yengema had 21 and Sengima had four. During a visit to the hospital in February 1977, each committee member was shown a hookworm larva under the microscope. This simple step, which convinced them that hookworm really did exist, accompanied by an explanation of how universal use of a latrine can break the life-cycle of this parasite, had resulted in the construction of 12 new latrines by the end of October 1977.

3. **Improved agriculture.** A government agricultural advisor stationed locally is assisting in the promotion of water-controlled rice farming and the making of gardens, in which foodstuffs to improve the people's diet can be grown (e.g. groundnuts, sesame seed, peas and beans).

4. **Better road communications.** Negotiations with the relevant government department and the local mining companies, about borrowing a bulldozer have proved unsuccessful so far.

5. **Improved village tidiness.** Blama had dug rubbish pits during 1976 and these were repaired and enlarged in June 1977. Sengima has also constructed eight such pits. Before this, rubbish was thrown anywhere and accumulated in heaps on the outskirts of the village.

6. **Treatment.** Those found to have a potentially serious disease during the annual general physical examinations are recommended to attend the hospital for treatment. Medicines are not taken to the village by the hospital staff as a matter of policy. However, the person for medicines on the committee is sold chloroquine tablets which he dispenses to anyone suffering from fever. He purchases 100 tablets for £0.90 and dispenses them at £0.01 per tablet, thus making an 11% profit. This was only allowed after all the committee members could state the dosage for adults, children and infants and the price.

A well nearing completion. A pulley made by a local blacksmith will be fitted to the bar.

After emphasizing the importance of children and pregnant women attending the weekly welfare clinics at the hospital for immunization, weighing and examination, the numbers at these clinics from the three villages has increased dramatically. A government-employed village maternity assistant is stationed at a village one mile from Yengema and helps with the instruction to Yengema's midwives. This village has recently decided to build a new house specially for deliveries, since they used to be conducted in the patient's house or in the women's society area of forest near the village. The committee have successfully insisted on a latrine being included in the building.

7. **Referral system.** Every hospital patient from a project village is given a brief discharge letter to the committee which states what has been done for him or her, the advice the committee should give (e.g. feeding for a child previously suffering from malnutrition), and the date on which the patient should return to the hospital if this is necessary. This system means that patients from project villages can sometimes be discharged from hospital earlier, since the committee continues the health teaching given in hospital and reports on their progress at meetings and checks-up on defaulters (especially useful for tuberculosis and leprosy sufferers needing long-term therapy).

THE FUTURE: Serabu Hospital trains State-Enrolled Community Health Nurses. This course, which has only recently been introduced in Sierra Leone, involves nine months' training in community health nursing. As of September 1978, the project provides fieldwork for them and they, in turn, help with expansion of the project to include new villages. Several new villages have enquired about being included in the project. It is hoped that, if the project continues to be successful, all the villages within five miles which wish to join the project will gradually be included over the next few years.

CONCLUSION

Though the project is still young, it seems to demonstrate a number of advantages:

a. The project entirely depends on the active involvement of the villagers. This means that they must understand why something should be done and be persuaded of its benefits before they will do it, and this will increase the likelihood of long-term effects. Only by involving the community fully can one tackle the roots of disease; handouts only have short-term effects.

b. Inclusion of the community's traditional health workers avoids rivalry, means that the programme is not unneccessarily disruptive to the existing cultural system, and makes use of existing skills.

The village health nurse wades through a swamp on his way to Blama.

Village children. One third of the population of Sierra Leone is under 15 years old.

c. The project is very adaptable. The health committee approach draws on available community resources, is responsive to local needs as expressed by the committee and conforms to locally set priorities within those needs.

d. It is extremely inexpensive. With the salary cost (to the hospital) of less than one quarter of one nurse's time, and a minimum of printed records, the running cost is very low. There are no transport costs since the staff walk to the villages. This is part of the policy of avoiding use of any "Western" technology not available to the villagers themselves, except where this is absolutely necessary (e.g. drugs). The only expenses to the villagers are the materials needed for wells and latrines (three bags of cement per well, two per latrine).

However, this type of project does have two requirements for success. The medical personnel involved must be willing to leave the curative role to which they are accustomed and go to the people in their villages, eat their food, sleep in their houses, walk their paths and share their life as equals. Secondly, they must win the confidence and cooperation of the villagers which takes patience, sympathy, honesty and no little effort.

STEPS FOR SETTING UP A HEALTH COMMITTEE

I. Raising Health Awareness

Raise the level of awareness of health problems among community members and leaders.

- informally discuss health problems/concerns with individuals and groups,
- explore their perceptions of existing health problems, their causes and consequences,
- have them identify "felt" and priority needs in relation to personal and community health improvement,
- have them consider ways of solving health problems/meeting health needs, particularly through their own efforts,
- suggest steps that they can take to achieve better health and living conditions (include the idea of forming a health committee).

If there is general interest in taking action to improve health, request a meeting with community leaders to discuss the health concerns expressed by the local populace.

- inform the leaders about the action community members suggested taking to improve health status/living conditions,
- describe the purpose and organization of a health committee, including the benefits it provides,
- suggest that the leaders hold a general community meeting to discuss health concerns and explore an on-going means for the community to participate in addressing/solving its health problems.

II. Forming the Health Committee

The community leader (e.g. village chief) presides over the general meeting held to discuss the health situation in the community and ways of alleviating health problems.

Health concerns and priorities are put forward by community members.

The concept of a health committee is explained and members to agree or disagree on establishing one for the community.

Individuals/families give a sense of their committment to participating in community projects/activities aimed at improving health.

The community leader asks for the nomination of individuals to hold positions as committee members. Those nominated, on agreement of the majority, are considered for selection.

The selection of committee members is done by all present. Those with the most "votes" are selected (and perhaps later "sworn in" if the committee is officially inaugurated by the community and health officials).

II. The Committee Begins/Maintains Operation

At the initial meeting of the health committee, members discuss/clarify goals and objectives, roles and responsibilities, operating procedures, record keeping, meeting schedule, etc. to ensure the effective operation of the committee. (The committee may find it necessary to select members to serve as chairman, secretary, etc. on a longer term basis, rather than have members rotate positions on a more frequent basis.)

The committee adopts a plan of action based on priority health needs and available resources. It prioritizes tasks, and assigns particular responsibilities to committee members.

The committee informs the community of initial health project(s) to be undertaken and agreement is obtained before proceeding.

The committee begins motivating community involvement and taking other steps necessary (e.g. obtaining needed resources) to achieve its objectives.

The committee proceeds to monitor/support/evaluate on-going community projects/activities, initiating new ones as success is achieved, redirecting others as needed.

The committee periodically evaluates the functioning of members, its operating procedures, objectives, etc. and makes adjustments necessary to better accomplish its aims.

(Adapted From: Colgate et. al., The Nurse and Community Health in Africa)

ROLE OF THE PCV IN THE COMMUNITY HEALTH COMMITTEE

- Initially assists in helping the committee begin operating (identifying tasks, setting objectives, etc.)

- Attends committee meetings to provide information and advice (when needed)

- Provides technical assistance in project planning, development, implementation, evaluation

- Suggests feasible projects and relevant topics for health education

- Provides information on a range of health subjects (immunizations, latrine construction, vector control, etc.)

- Helps identify available resources and tap outside resources (when needed)

- Advises about avenues for collaborating with health/development agencies and integrating health activities into other development projects

- Assists in organizing the community and generating community participation

- Works with committee/community members to implement health projects/activities

- Helps facilitate group interaction and the efficient/effective functioning of the health committee

- Suggests alternative ways to proceed when the committee and community disagree on decisions made by the committee

- Conducts sessions for committee members on problem-solving, decision-making, organization and management, motivation, record-keeping and other techniques

- Assists the committee in providing support and supervision to the community health worker

MEETINGS

There are different kinds of meetings. Some involve general participation in the discussion and in making decisions (committee meetings, board meetings, public meetings on an issue of concern to the community). Others, like the annual assembly of an association, use a few speakers who address a largely passive audience. In health education we are concerned with the first type of meetings.

Purpose

Meetings are held to gather information, share ideas, make decisions and make plans to solve problems. Meetings are different from group discussions. A group discussion is free and informal. Meetings tend to be held for a special reason and are more organized. They have, for example, appointed or elected leaders. Meetings are an important part of successful self-help projects.

Group Size

In meetings held by organizations and associations, 20 to 50 persons may come together. Community leaders may have small meetings where 5 to 10 persons take decisions about community needs. On the other hand, the whole community can come together in a meeting to learn about problems and express their views.

Planning a Meeting

Need - It is important that the members of the organization or the community see the need for a meeting. Does the problem require a meeting, or can it be handled easily by one or two members? The decision to hold a meeting should be made by the group members or community leaders themselves.

Time and Place - Many organized groups have regular times and places for their meetings. The village heads may meet once a week at the Chief's house. The neighborhood council may meet monthly in the community hall. The tailors' guild may meet every two months at a school or mosque.

Make use of regular meetings to solve problems and lay out plans for action. If a special meeting is necessary, have the leaders of the group decide on a suitable time and place that will be convenient for all.

Announcing the Meeting - Each group or organization has a way of informing members about meetings. This may be by posters, town criers or word of mouth. The group should make the announcement itself.

Word of mouth is often the best way to announce meetings in a village or small neighborhood. The need for the meeting can be announced by the leader to the people who work closely with him. These people then spread the word to others who in turn tell others and so on.

Announcements will spread more quickly and reliably if a system is established to facilitate communication. In such a system, each member of the group has the responsibility of contacting certain people. The leader will contact four or five people to announce the meeting. Each of these people knows the names of five other people whom he or she will contact. These people in turn will contact others.

One way to do this is to look at the different sections of the village or neighborhood. There should be someone in each section for the leader to contact first. If Mr. A is away when the leader tries to contact him, Mr. F could then fill in for Mr. A.

Meetings should be announced several days in advance to give people time to prepare. But do not announce the meeting too far in advance, people may forget.

Setting an Agenda - An Agenda is a list of topics or issues that will be discussed at the meeting. This should be planned carefully. People will lose interest if they come to a meeting where no one knows what is supposed to happen.

If the group already has leaders, see them some days before the meeting. Discuss the agenda. There may be issues remaining from the last meeting that must be discussed first. There may also be new topics to add. An agenda should not be too long. Ideally, it should include only one or two important topics. A long agenda means a long meeting. After one hour people start to get tired. After two hours they start to leave. If people leave before the work is finished, the group may not be able to solve its problems.

Also a long agenda may force people to make quick decisions which they may regret later. When the agenda has been agreed upon, look at the topics. What information will the group need to be able to discuss the topics carefully? If a farmers' cooperative wants to meet to discuss ways of improving their crops, they will need information on types of fertilizers, their costs and effects. Some of the group leaders should volunteer to find out this information. You can guide them to where to look. Do not do it all by yourself. It is useful for people to learn how to find information and resources.

When the meeting is announced, also tell people briefly what will be on the agenda. This will help them prepare. Members can look for information themselves. They can begin to think of ideas to be put before the meeting.

Conducting the Meeting

Leadership - Most organizations, associations and councils have their own leaders. These are the people who should be in charge of the meeting. You will have already given them encouragement and suggestions during the planning of the agenda.

You should speak when the leaders ask you to talk, and occasionally give other comments. Be sure that the other group members have the opportunity to speak their minds fully.

Participation - Participation in the meeting depends on the culture of the community. In some places leaders do most of the talking. In others, every member speaks. Encourage the kind of participation that is acceptable to the people. You can add comments like these to encourage more people to talk.

> "It would be useful if we could hear more about this flooding problem from the people who live near the stream."
>
> "This problem of dog bites worries us all. I am sure those members with small children must have some experiences to share with us."

Make Issues Clear - Before the meeting can reach intelligent decisions, everyone must understand the problems and suggested solutions. Comments like these can help:

> "Is everyone clear about how much money this project will require?"
>
> "Does anyone want us to explain again how these immunizations work?"
>
> "Does everyone understand what will be the responsibility of the community and of the sponsoring agency in implementing this project?"

Reaching Decisions - Here are four ways in which decisions can be made in meetings:

- the group as a whole discusses an issue; after some time the leader or another member may say, "I think that we all agree to take this action. Does everyone feel this way?" At this point anyone can object; if there are objections, then discussion continues until there is a final sense of agreement; this is called consensus decision-making.
- an issue can be placed before the group and members are asked to vote on whether they accept or reject the idea; action is taken on the idea that the largest number of people prefer;
- the leader listens carefully; when he or she senses that everyone is in agreement he or she announces a decision;

- the leader alone may decide on what he or she thinks is best and announce that his or her decision stands for the whole group.

The first two methods are very similar. In both cases a decision is not taken until there is general agreement in the group. This may take longer than voting or the leader deciding for the group but it encourages participation. When everyone is in agreement, action is very likely to follow.

Taking Action

The purpose of a meeting is to decide on plans that will help solve a group or community problem. Simply put, the group must:

- set objectives (desired results);
- decide on strategies (ways to solve the problem);
- find resources;
- set a timetable for action;
- give tasks for individual members or small groups of members (committees);
- meet regularly to review progress and make improvements or changes in the plan as necessary.

(Adapted From: WHO Draft Materials)

FOUR ROLES FOR STRUCTURED MEETINGS

1. Discussion Guide: Guides the members through the meeting.
2. Timekeeper: Keeps track of the time.
3. Recorder: Records information for use during the meeting.
4. Process Observer: Watches and reports how members are working together as well as what they are accomplishing.

> NOTE: Group members become stronger as they practice each role. Be sure your group rotates the roles so everyone has an opportunity to learn the skills required in each one.

Discussion Guide:

- Start the meeting at the scheduled time.
- Conduct attunement and "be here now" activities.
- Go around the group to see if everyone is ready to begin the meeting. Take care of individual needs before starting business.
- Be sure the group has a timekeeper, a recorder and a process observer.
- State the purpose of the meeting as you see it. Get an agreement. (If this means changing the purpose, that's all right. Consensus of members about the meeting's purpose or goal has to be reached before proceeding.)
- Reach an agreement on the closing time. Ask the timekeeper to give the group a 10-minutes signal before closing time (or whatever warning they want).
- Ask the group to call out tasks to be accomplished in order to reach the goal. Ask the recorder to write them on the chalkboard.
- Assist the members in selecting the order of importance and the time allotted for each task.
- Guide the members in working through the agenda items.
- Ask for the process observer's report.
- End the meeting with a summary or other form of closure.

Timekeeper:

- Act as an alarm clock, not a judge. (That is, alert the others at the times they ask. If members agree on a time extension, be ready to respond to the "resetting". It's all right if tasks are not completed according to plan!)

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- If no one else does it, be sure to get the time allotted for each task. (You don't have to do all of the work on time needs if others are willing to share this.)
- Remind the group members near the end of the meeting to save time for the process observer's report.
- Remind; don't reform. Be gentle.

Recorder:

- See that a wall chart (or chalkboard) is in everyone's full view. Have marking pens or chalk and eraser ready for use.
- Write the agenda items and their priority (order of importance) and the time allotted for each (if the groupr wants this kind of assistance).
- Record the proposals and read them to the group at the end of the meeting.

Process Observer:

Watch (like a camera, without judgement, if possible) how the members work together. Ask for time at the end of the meeting to give your answers to the following questions:

- Did the members all agree on the meeting's goal?
- Was the style of leadership appropriate for the task?
- Was the timekeeping effectively carried out?
- Was recording, as needed, effectively carried out?
- Did members show feelings of friendliness and trust?
- Did everyone participate in some way?
- Did members reach their goal, or if not, did they understand why not?

On a scale of 1 to 10, rate the success of the group life (apart from the group task):

1 2 3 4 5 6 7 8 9 10

Remember that you can take part in the meeting as well as observe it!

(From: Peace Corps. Small Scale Beekeeping: A Manual for Trainers.)

Session 16

WORKING AS A COUNTERPART

TOTAL TIME 4 hours

OVERVIEW

A very important working relationship for the Peace Corps Volunteer is the one they maintain with Host Country Nationals who are their counterparts. The Counterpart may be assigned to or identified by the Volunteer. At different times the Peace Corps Volunteer and the Counterpart will be consultants, friends, and leaders in their collaborative efforts. When the PCV leaves the community, the Counterpart hopefully will remain to carry on the projects they began together. Because projects depend greatly on the relationship between the PCV and the Counterpart, the Volunteer needs to have a clear idea of their roles and the nature of their involvement with their Counterparts and with the community. In this session, participants define what it means to be a Counterpart, explore ways to maintain a collaborative relationship, and examine the role and relationship of the Volunteer and Counterpart.

OBJECTIVES

- To explore different styles of working with others and assess the consequences of those styles in development projects.
  (Steps 1, 2, 4)
- To develop and use a working definition of Counterpart.
  (Step 3)
- To examine the role and relationship of a Volunteer and his or her Counterpart.
  (Step 4)
- To solve a problem related to working with a counterpart using the OFPISA problem-solving method.
  (Steps 5, 6)

RESOURCES

The Role of the Volunteer in Development (Peace Corps)

Handouts:
- 16A Working Style Inventory
- 16B Continuum of Volunteer Helping/Work Styles
- 16C The OFPISA Problem Solving Model

Trainer Attachment:
- 16A Style Analysis Handout

MATERIALS

Newsprint, felt tip pens, first or second year Volunteer and his or her Host Country National Counterpart.

PROCEDURE

Trainer Note

This session, while designed primarily for pre-service Volunteers, should prove useful to in-service Volunteers as well. For in-service training Steps 1, 2, 4 and 5, should be adapted to reflect the realities of the PCV's own personal experiences and previous training. The problems they choose to solve in Step 5 should be current problems they are facing.

You should obtain from the Peace Corps In-Country Program Directors or second year Volunteers, any guidelines or information that participants should use when selecting a Counterpart (e.g. language capabilities, status in the community, formal educational background). This information should be used in Step 7.

Step 1
(30 min)

Personal Working Styles

Explain the session overview and clarify each of the objectives. Distribute Handout 16A, (Working Style Inventory). Have the Trainees read the instructions, do the inventory and score themselves afterward. Answer any questions which may arise. Suggest that Trainees move through the situations on the inventory without spending too much time on any one. Explain that there are no "right answers" and that the objective is to develop an accurate assessment of their working style. Any attempts at "second guessing" the inventory are defeating the purpose.

When the Trainees have finished calculating their scores, tell them that this inventory corresponds to a continuum of work styles and that their scores correspond to one of the following work styles:

- A = Direct Service
- B = Demonstration
- C = Organizing with Others
- D = Indirect Service

Distribute Handout 16B (Continuum of Volunteer Help/Work Styles) and ask them to read the explanation of the styles provided on the handout.

Ask for a show of hands of high scores in each of the four categories of styles. Discuss the continuum diagrammed at the top of the handout. Ask the Trainees to identify "who is responsible for the work" on each side of the diagonal line. Have them determine the extent to which dependency and/or self-reliance are being fostered by each working style. Discuss whether or not they feel that the inventory is an accurate reflection of their working style; and, if not, why?

Trainer Note

When discussing "Who is responsible for the work" on each side of the diagonal line of the continuum, have the participants examine this issue in terms of both working with a community and working with a Counterpart.

Step 2
(35 min)

Working Styles Continuum

Have the Trainees divide into pairs, such that each person in each pair scored high in a different category of the continuum. Assign the pairs the following tasks:

1. Discuss two or three of these situations and for each one, share the reasons that you scored it the way you did, including any conditions that were present that made you decide one way or the other. Some examples of conditions might be the credibility of the PCV, similar past project failures, the timing of the project in relation to the situation, and so forth. Try to discover what assumptions you are making.

2. For each situation, discuss and list what the consequences of your choices may be in terms of the principle of working towards eventual self-reliance for the community and for the Counterpart.

    - What are the critical factors to be considered in each situation?
    - What might be some consequences of a tendency toward any one style?
    - What are the long term/short term effects of each working style?
    - How does your need to establish credibility and your need for positive reinforcement influence your working style?
    - Is self-reliance a desirable goal in all cases?
    - During this discussion, what were the points you generally agreed and/or disagreed on?

At the end of the discussion, have the group draw some conclusions about the advantages and disadvantages of the four working styles by completing the newsprint chart you have developed from Trainer Attachment 16A (Style Analysis).

Trainer Note

Prior to this step draw on newsprint a large version of Trainer Attachment 16A (Style Analysis) and keep this posted in a visible spot for the rest of the session.

The following summary, taken from The Role of the Volunteer in Development, includes points that should be mentioned during the discussion on the various working styles.

- These four styles can be seen as related to stages in development of self-reliance. For example in a beginning stage, a group may never have worked together, may not have any technical resources and may not believe that it is possible to make improvements. In such a situation a volunteer may decide that the best way to get things moving is to: a) establish credibility; b) show people that (for example) a good laying hen can be produced; and c) salvage a bad situation. In so doing, he or she may decide to simply do the work himself or herself and show the sceptical that something could be done. In this instance, the volunteer may be using a combination of "direct service" and "demonstration".

- At a later stage of development as a group or project moves towards self-reliance, a Volunteer may decide that the best way to help a group move along is to work with only the leadership in a community to help with ways to effectively plan or communicate together. In this instance, the volunteer will do nothing without a Counterpart from the community. The primary task in this case would be leadership training and "organizing with others".

- In these situations, one must consider the circumstances and the consequences and address a critical question: Is one looking for a short term or a long term result?

- In reality, different styles or combinations of styles may be called for at different times, depending on the circumstances, the urgency of the task, what people are expecting of the Volunteer, whether the project is at a beginning stage or a later stage, whether one is addressing a long term or short term situation, etc. Sometimes, a Volunteer may need to use all four work styles on different days of the week for the same project. Whatever the style, there are consequences for the way a volunteer works."

Continued

Tell the group that the rest of the session will primarily focus on what it means to be and work with a Counterpart and the advantages and frustrations that occur in this type of working relationship.

Step 3
(20 min)

Defining Counterpart

Introduce this step by asking the participants to define the terms "Counterpart" and "Colleague". Ask them which of these words they would use to define their relationship with the other members of their training group and which would apply to their relationship with a Host Country National who is:

a) assigned to work with them by the Government.
b) someone in their community who is already working in the Volunteer's assigned area.
c) an interested community member.

If they differentiate between these terms ask them to discuss on what basis they are making a distinction. Possible points for discussion include:

- the status implied in the two terms (e.g., hierarchy or equality).
- cross-cultural values associated with either term.
- level of training/experience of the Host Country National assigned to this program area.
- amount of training the participants feel they will be reponsible for imparting to a Host Country National or receiving from this person.
- supervisory roles.

Next write the dictionary definitions of Colleague and Counterpart on newsprint (see Trainer Note for definition). Ask the group to discuss how closely these definitions match their own. Have them comment on any insight they may have gained by examining these words and their concepts.

Trainer Note

Webster's Ninth New Collegiate Dictionary defines the terms colleague and counterpart as follows:

Colleague: an associate in a profession or in a civil or ecclesistical office

Counterpart:
1a) a thing that fits another perfectly
1b) something that completes; complement
2a) one remarkably similar to another.
2b) one having the same functions or characteristics as another; equivalent.

The purpose of this step is to have the participants begin to examine their thoughts on how they tend to view what being a Counterpart means to them. This term for pre-service participants may be one they've never used or thought of before and they may view it as a concept that is only used in cross-cultural contexts. In talking with others in the training center, participants may have formed the impression that a Counterpart is a person that has lower status or educational background and is the recipient of the Volunteers' "expertise".

Step 4
(35 min)

Conversation With A Counterpart

Introduce the Volunteer and his or her Host Country National Counterpart who have been invited to attend this session. Tell the participants that their guests have been asked to share their experiences, difficulties, and benefits of their relationship. At the end of the presentation open up the session to questions from the group.

Trainer Note

Prior to this session invite a Volunteer and his or her co-worker to make a brief presentation on their experiences of working as a team.

Tell them that they should base their presentation on the working styles definitions in Handout 16B. Ask them to also address the issue of how they came to work together, the "working styles" they used, and how these styles have changed through time. Before their arrival, send them a copy of the working styles and the continuum so they may use these terms in their presentation.

Ask this pair to conclude their presentation by using the chart in Trainer Attachment 16A as a format for listing the advantages/ disadvantages of each working style they have used.

10 Minute Break

Step 5
(60 min)

Problem Solving

Begin this step by asking the group to look at the two lists from Steps 3 and 4 which contain a summary of the points made for and against each type of working style. Ask them to select one disadvantage or frustration that they listed under the heading "Organizing with Others".

Distribute Handout 16C (OFPISA Model and Worksheet) and ask the group to read it. Using the problem selected by the group, work through the problem solving worksheet with them, clarifying along the way any questions they may have.

When the group feels comfortable with the model, ask them to select three other problems listed on the charts and form three small groups. Tell each group to resolve their problem using the OFPISA model as a format.

Answer any questions participants may still have about the assignment and tell them they have 40 minutes to work through the task.

Trainer Note

Prior to this step prepare a piece of newsprint using the format found in Handout 16C (page 3). Ask the Volunteer and Counterpart who previously presented in Step 4 to assist in this step.

Step 6
(30 min)

Presenting Their Solutions

Have each group present their problems, the solution and the steps they used to reach an agreement on the solution. After each presentation allow a few minutes for other participants to discuss the solutions and to determine their acceptability. After all three groups have completed their presentations ask them to discuss:

- how helpful it was in solving their problem.
- the problems they encountered in using this model.
- how it compares to any other problem-solving models they may have used in the past.
- how they think they may use it in the future.

Step 7
(10 min)

Planning for the First Month in the Field

With the help of the guest PCV and Counterpart, have the participants brainstorm a list of actions for selecting or working with a Counterpart that could be done during their first month in the field. This list may include for those without assigned Counterparts:

- Establishing criteria for selection (e.g., language, formal education, sex).
- Determining actions to take for the selection process (e.g., meeting with village leaders, talking with officials in the program where you are working).
- Identifying resources for the Counterpart's pay or salary.

For those participants who will be assigned a Counterpart, the first month might include such activities as:

- Jointly determing their duties and responsibilities vis a vis the program.
- Establishing program or project objectives.
- Developing a work plan.

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WORKING STYLE INVENTORY

Self-Assessment

Ten situations typical of those faced by Peace Corps Volunteers in the past are described below. Four different ways of handling each situation are then described. Select the way you think you would be most likely to handle each situation and assign the number "4" to that choice. Select your next preferred choices and the least preferred choice. Assign your numerical choices directly on the scoring sheet attached to this Self-Assessment form.

This form is designed to help you assess your own personal preferred style of handling situations which you are likely to face during service as a Volunteer. Later, you will analyze the results yourself.

ASSIGN A "4", "3", "2", OR A "1" IN THE ORDER OF YOUR PERSONAL PREFERENCE FOR HANDLING EACH SITUATION DESCRIBED. PLACE YOUR RESPONSES DIRECTLY ON THE SCORING SHEET ATTACHED TO THIS SELF-ASSESSMENT FORM.

SITUATION #1

You are entering your assigned village to take over an appropriate technology project. The Volunteer you are replacing has already left. The project is three years old. You have had brief discussions with the village leadership and get the sense that the project is being received with mixed results. You have been asked to address a meeting of village leaders to introduce yourself. How would you prefer to handle the situation? (Respond on the Scoring Sheet.)

Choices

A. Present your approach to the project and ask for questions and advice.

B. Seek the leadership's view of the project and identify problems.

C. Ask the leaders to describe their goals for the project as well as other pressing needs the village is facing.

D. Ask the leadership if you can sit in on this meeting and become better acquainted with village needs before addressing a meeting.

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* edited from: The Role of the Volunteer in Development, Peace Corps Core Curriculum Materials, December 1981, OPTC, U. S. Peace Corps, pp. 67-82.

SITUATION #2

You are assigned to a small vegetable cooperative project which has been underway for several years. There is very high interest in the project among the village at large. However, the local leadership has just decided all coop labor must be assigned to re-building the bridge recently flooded out during the rainy season. This is planting time for the vegetable coop. What would you do?

Choices

A. Persuade the leaders to change their priorities, at least to enable the once-a-year planting in the vegetable fields.

B. Help the leadership identify some alternatives to choosing between the vegetable crop and the bridge.

C. Help the local vegetable coop manager develop strategies to try to get the local leaders to reconsider.

D. Join in and facilitate bridge repair in an effort to complete it in time to also plant vegetable plots.

SITUATION #3

You are in the last six months of your tour. It is unclear whether you will be replaced by another Volunteer. The local project committee is urging you to be sure to finish a gravity irrigation project before you leave. You are not sure you can complete it in the time allotted. How will you handle this pressure?

Choices

A. Try as hard as you can to complete the project.

B. Lead a planning meeting with the local project committee and staff and try to develop alternate strategies.

C. Concentrate on developing skills in the local project staff to enable them to complete the project after your departure.

D. Pass the dilemma on to the local project staff leaders and encourage them to solve the problem and tell you what to do.

SITUATION #4

A new counterpart has been assigned to your food production project. The new counterpart does not have the connections with local district officials which the previous counterpart had and seems unable to use connections to get needed inputs. If you do not get the needed inputs soon, serious food shortages could result. What will you do?

Choices

A. Use your previous associations through the past counterpart to ensure the required inputs are received in time.

B. Develop strategy with new counterpart to provide introductions and contacts to enable the project to get inputs in time.

C. Ask new counterpart to develop plan to get inputs and critique plan.

D. Encourage new counterpart to go out and try to figure out how to get needed inputs.

SITUATION #5

You have taken over an agricultural production project of the "green revolution" type with a "most promising farmer" orientation. There are two very progressive farmers using the new technologies and greatly increasing their cultivated land. Most farmers in the area have not adapted the new practices. The village leadership is predicting scarcity to starvation next year if food production is not greatly increased. Where will you focus your time?

Choices

A. On increasing food production by whatever means, including using the progressive farmers as "model" farmers for others.

B. Balanced between encouraging the progressives and working directly with more traditional farmers.

C. Organizing traditional farmers and training them in new agricultural practices.

D. Identifying why traditional farmers are not adopting new agricultural practices.

SITUATION #6

The village to which you have been assigned has a beekeeping project going and is highly motivated about it. Your assignment is a general agricultural assignment, but you happen to know quite a bit about beekeeping and see some ways to help improve their already successful project. They have shown no interest in using you in that way. How will you respond?

Choices

A. Speak to village and project leaders laying out some of your ideas for improving the project and suggesting a change in your assignment.

B. Make suggestions from time to time, informally, demonstrating your competence in this area.

C. Share your dilemma with your counterparts, seek their advice and follow it.

D. Move ahead with your assignment as planned, being alert to any future opportunities to be helpful in an informal way with beekeeping.

SITUATION #7

You are beginning the second year of your two-year teaching contract. You have been able to introduce some innovative methods and students and fellow faculty have responded well and begun to adopt them. Some students in particular have "blossomed" under your direction. What are your priorities for the next eight months?

Choices

A. Focus on blossoming students and bring more into the fold.

B. Organize special teacher-training seminars to broaden and deepen innovations already adopted.

C. Seek opportunities to co-teach with counterparts to solidify innovations already adopted.

D. Begin planned withdrawal to lessen the dependency on you for sustaining innovations adopted.

SITUATION #8

You are a health and nutrition specialist for a community clinic with a very vague and general assignment. The needs surrounding you are overwhelming, but you don't know where to begin. The clinic director seems glad to have you but has provided no specific direction. How will you begin?

Choices

A. Assess your strongest field and make a concrete proposition to the director to clarify your role.

B. Ask for a meeting with the director to mutually explore priorities for the clinic and ascertain where you can be most helpful.

Choices (continued)

C. Ask your counterpart(s) if you can observe them for a month in hope of identifying areas where your skills can complement theirs.

D. Conduct a community needs assessment and develop your role in response to community needs.

SITUATION #9

Your counterparts are becoming increasingly dominating during project community meetings. As their confidence and skill has grown, you have gladly given more responsibility to them; but it seems to you that other committee members are becoming withdrawn from the project. You want to build a strong project team, rather than just strong counterparts. What should you do?

Choices

A. Raise the issue directly with your counterparts and offer to lead the next committee meeting to demonstrate participative leadership skills.

B. Provide help in planning the next meeting and make some specific suggestions to the counterparts about how to modify leadership behavior.

C. Watch for opportunities to provide feedback, ask the counterparts questions about how they think the meetings are going and reinforce participative behavior.

D. Leave the situation alone and count on the community to call the counterparts on dominating behavior, then reinforce the offer to help.

SITUATION #10

Your counterpart is moderately skilled and experienced and moderately interested in your project. He or she does not see the project as advancing his or her own career. The village, however, is vitally interested in the project. How would you handle this situation?

Choices

A. Try to get counterpart reassigned and temporarily take over direction of the project until a new person is assigned.

B. Spend time with counterpart trying to identify ways in which his or her role in the project can both meet project goals and career aspirations.

C. Work with counterpart on career goals and help him or her develop a strategy for pursuing them, including leaving the project, if appropriate.

Choices (continued)

D. Facilitate a meeting between community leaders and the counterpart to see if they can come up with a mutually satisfactory solution to the problem.

SCORING SHEET

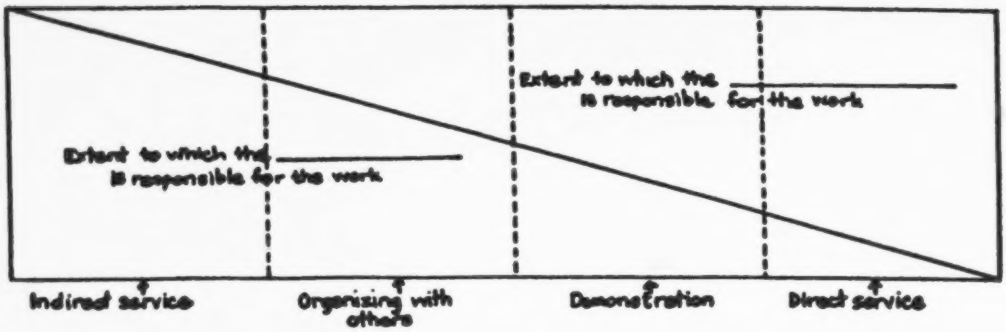
Situation #1	A	B	C	D
Situation #2	A	B	C	D
Situation #3	A	B	C	D
Situation #4	A	B	C	D
Situation #5	A	B	C	D
Situation #6	A	B	C	D
Situation #7	A	B	C	D
Situation #8	A	B	C	D
Situation #9	A	B	C	D
Situation #10	A	B	C	D
TOTALS	________	________	________	________

Instructions:

Enter your responses for each of the 10 situations. Assign a "4" to your first choice, a "3" to your second choice, a "2" to your next choice and a "1" to your last choice in each situation.

When you have responded fully to each set of choices, total the number vertically in each column.

CONTINUUM OF VOLUNTEER HELPING/WORK STYLES


Extent to which the ______
is responsible for the work
Extent to which the ______
is responsible for the work
Indirect service
Organizing with others
Demonstration
Direct service

COLUMN A: **DIRECT SERVICE**

This is a direct approach in which the Volunteer mostly does the work, gets a project organized, provides a needed service where none exists and generally takes the initiative for making things happen. In most instances, this means that the Volunteer takes responsibility for the action or project, and that a counterpart may or may not get involved - and even if involved, will look to the Volunteer for action and leadership.

COLUMN B: **DEMONSTRATION**

In this approach or situation, the Volunteer spends most of the time demonstrating to others how to do something, but also spends a lot of time doing it themselves. Most often the responsibility is shared with one or two counterparts. The work is a combination of direct service and training/demonstration, often with the Volunteer sharing some responsibilities with a promising local leader or an assigned counterpart.

COLUMN C: **ORGANIZING WITH OTHERS**

In this system, the Volunteer encourages and stimulates promising counterparts and others in the community, generally - although not always - working with people rather than directly on projects. (NOTE: Throughout this session, we use community in its most generic sense - it could be a school community, an agricultural office, or a town or section of a city). The focus is on building leadership and helping a group or organization develop which will continue the work. The primary work is behind the scenes using influence, assisting as a resource in developing alternative solutions which the people choose or generate themselves, serving in a training capacity, occasionally serving as a role model in doing work and so on.

COLUMN D: **INDIRECT SERVICE**

In this approach, the Volunteer responds to a range of situations and problems raised in volunteer work by helping others solve their own problems; the Volunteer does not direct any of the work but concentrates on helping the people define and refine their perceived need. Help is given only on request, rarely initiated by the Volunteer. The Volunteer may even come and go, leaving the project to do something else and thus reinforcing the autonomy of the group. The way the Volunteer works is primarily clarifying, asking questions, listening a lot and facilitating.

THE OFPISA PROBLEM SOLVING MODEL

Buckminster Fuller said that a problem well stated is a problem solved. In order to state a problem completely and well, as much relevant information as possible must be gathered. The following model is designed to assist in the definition of the problem, the examination of all its aspects and an acceptable resolution to the conflicts and challenges presented by it.

In the model, first the original problem is stated. This may also be a goal, objective or issue.

Then, the factors relating to the problem are listed. The problem may be defined as a temporary equilibrium between factors that move toward change and those that restrain it. In order to solve the problem, the equilibrium or tension must be broken. The equilibrium may be likened to a force field: the problem is held static between opposing forces that push and pull. All factors are listed that have any bearing on the problem: One list notes the driving forces toward resolution and another notes factors that serve as restraining forces. The journalistic "w's" are useful in identifying the factors: who, what, why, where, when and how.

The problem redefined or restated is considered next. After all the factors both for and against resolution are identified, the real problem may emerge. This may be a simple restatement of the original problem or it may be another problem entirely, based on new information provided by examining the various factors.

Many and different ideas are generated by brainstorming: all ideas, suggestions and possible solutions are listed without discriminating among them. These serve to either increase the forces driving towards resolution or decrease the restraining forces. The brainstormed list may be comprised of logical, sensible ideas as well as those that seem crazy or not at all feasible. It should be remembered that most of the important or major inventions of the world had their origin in a "strange" idea that somehow worked! Therefore, judgment should be suspended during this phase and all creative suggestions listed, regardless of their initial appearance.

To devise a solution to the problem, a selection and comparison of the various ideas are made, thereby generating concrete and potentially viable solutions.

Each potential solution is evaluated to determine its acceptance by those affected by it. If the solution is not acceptable, another solution must be tried. If it is viable, then it is implemented and the problem has begun to be resolved.

One way of remembering this model is to term it the OFPISA (as in the leaning tower):

O - Original problem

F - Factors

P - Problem redefined

I - Ideas

S - Solutions

A - Acceptance

PROBLEM SOLVING WORKSHEET

O - Original Problem

F - Factors: Driving Forces Restraining Forces

P - Problem Restatement

I - Ideas

S - Solution

A - Acceptance

From: CHP International, Inc., Staff Training Materials.

STYLE ANALYSIS

Working Styles	Advantages/ Satisfying Experiences	Disadvantages/ Frustrations	Motivational factors for adopting this style
Direct Service			
Demonstration			
Organizing with Others			
Indirect Services			

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SESSION 17

PLANNING AND IMPLEMENTING A HEALTH DAY

TOTAL TIME

8 hours preparation
7-8 hours implementation
1-2 hours evaluation

OVERVIEW

Designed to occur near the end of training, the Health Day is an activity which gives participants the opportunity to apply their knowledge, attitudes and skills in a manner that actively demonstrates what they have learned during the training program. Using their individual health education plans, and the concepts of health messages, opportunities, techniques, and community organization, participants work together to develop and implement primary health care field day in the local community.

In doing this kind of involved excercise, participants can test out their project planning skills and practice facilitating with "real" community members. The entire training group is exposed to a wealth of creative educational ideas and approaches just before heading out into the field. Additionally, participants and trainers are alerted to areas where more training or back-up information may be needed in the future.

OBJECTIVES

- To plan and implement with your training group a Health Day which includes a series of events which help to educate local people about health.
- To plan and implement the day-long event such that it incorporates a variety of educational and promotional methods and materials and demonstrates competency in the technical areas of primary health care and CCCD activities.
- To evaluate the effectiveness of the Health Day and identify ways to strengthen the events, techniques, and materials, for potential use in the future.

RESOURCES

Any resources developed and/or used in this training program.

Handout:
- -17A Guidelines for Preparing the Health Day

MATERIALS

As determined by participants and the training budget.

PROCEDURE

Trainer Note

A special note regarding the Health Day as a training activity: while the time investment is considerable for planning and carrying out the Health Day, the payoff is rich in terms of the opportunities afforded trainees for applying new knowledge and skills. Valuable practice in facilitating health education activities is one of the more obvious benefits of the Health Day. Perhaps more subtle but vitally important is the practice participants have in logistical planning, budgeting, coordination, time management and the list could go on. A major determining factor in the success of this kind of training is the manner in which it is presented to the trainees. If the trainer gives an introduction to the event that is too light- hearted, then participants may plan an end-of-the-training party of sorts. Likewise, if the trainer underscores the potential for "trying out" what has been learned, then the group is likely to perceive the Health Day as a final time to practice skills and reassess their abilities.

Well ahead of the planned date, talk with the participants about the Health Day and explain that they will be in charge of planning, promoting, implementing and evaluating the event. Be sure to cover all points mentioned here in Step 1.

Step 1
(10 hrs)

Preparing for the Day

Present a brief introduction to the purpose and general objectives of the Health Day. Explain that fairs or field days are often important aspects of community life in developing countries. They provide an opportunity for people to gather, talk and learn about new happenings or innovations. Point out that the basic purpose of the Health Day is to provide the participants with the opportunity to creatively demonstrate and assess their knowledge and skills in PHC activities and health education.

Distribute Handout 17A (Guidelines for Preparing for the Health Day). Review and carefully explain each of the guidelines. Answer any questions and clear up any confusion the group may have. Emphasize that, from this point on, the role of the staff will be to provide advice and guidance. The participants will be expected to take full ownership and responsibility for the event.

Explain that they will have approximately 8 hours to prepare for the Day, 6-7 hours to carry it out, and 1-2 hours to evaluate it after guests have gone. Suggest they begin their preparation phase by appointing a facilitator and brainstorming a list of the major task areas associated with the events. Mention such areas as: promotion, budget control, scheduling, setting up, music, games and demonstration topics.

Step 2
(6-7 hrs)

Carrying-Out the Health Day

Assist participants in carrying out the events they have planned. Allow them as much freedom as possible in "running the show".

Step 3
(1-2 hrs)

Evaluating the Health Day

Ask the group to conduct an evaluation that will help them determine how well the Health Day was planned and implemented. Suggest that they use Handout 27D (Evaluation of Practice Session) from Session 27 as a way to discuss each event. Be sure that the group identifies specific knowledge and skill areas where participants demonstrated particular strength or weakness. Ask them to address problems which emerged during the activities and discuss possible solutions. Also, help participants understand the parallels between some of the difficulties encountered during the planning and implementation of this event and problems they are likely to encounter in their future technical work. End the day by thanking the group for their hard work.

GUIDELINES FOR PREPARING FOR THE HEALTH DAY

> Everyone should participate fully in preparing for the event.

> In keeping with the overall goal of providing the opportunity to creatively use skills acquired during the program, the role of the training staff will be limited to providing guidance and advice. Everyone should have the opportunity to be responsible for all aspects of the Day.

> The Day should consist of a series of activities, games, and events related to primary health care and health education which would be of interest to the surrounding community.

> Each of you will be responsible for preparing and presenting at least one activity during the course of the day of the day.

> The Day should be designed to last six to seven hours.

> Throughout the activities of the Health Day, there should be an emphasis on the integration of the themes presented during the training program.

> The event should be held wherever there is sufficient room for a community gathering. It may be held in conjunction with the local clinic or some other group (e.g., the school or a Mother's Club).

> The training group is responsible for food, fuel, water and other necessary materials or supplies.

> Music, games and food should be an integral part of the Day.

> A schedule of events and other appropriate information should be developed and made available to all participants and guests.

> Following the Health Day, the group will be responsible for designing and implementing a structured evaluation of the effectiveness of the event.

Module 4

Health Education Module

Behavioral Objectives

By the end of this module participants will be able to:

1. Identify community practices affecting health that can and should be modified or reinforced through health education by doing the following:
    - identify priority community health problems,
    - distinguish and prioritize harmful and helpful health related practices, and factors that enable or restrain that health behavior.

2. Write and critique two health education objectives according to the criteria presented in Session 20.

3. To develop and critique a plan for a health education project that follows the guidelines stated in Session 21.

4. Correctly select and use appropriate techniques of storytelling, using pictures to stimulate discussion and demonstration for specific health education objectives and a particular target group, following the guidelines given in Session 22.

5. To adapt a health visual aid using tracing and/or drawing so that it meets the six design criteria stated in Session 23 and applies the cultural considerations stated in Sessions 22 and 23.

6. To pretest and adapt a health message following the guidelines given in Session 24.

7. Plan, conduct and evaluate a health education session that follows the four steps of the experiential learning cycle and meets the criteria for a good learning experience described in Session 25.

Session 18

INTRODUCTION TO HEALTH EDUCATION

TOTAL TIME 2 hours, 15 minutes

OVERVIEW

Education concerning prevailing health problems and methods of preventing and controlling them is the first of the eight essential components of primary health care discussed in Session 5 (Primary Health Care). Successful community health education requires a good understanding of the aims of health education in primary health care. Ability to plan, carry out, monitor and evaluate health education projects is also necessary. This session introduces the content and organization of the Health Education Module (Sessions 18-27). During the session participants discuss the aims of health education and do a problem solving activity in small groups, using eight steps for planning, conducting and evaluating health education. In following sessions they focus on and practice each step in more detail.

OBJECTIVES

- To identify five basic aims of health education in primary health care.
  (Steps 1, 2)
- To describe examples of health education for individuals, groups, and communities.
  (Step 3)
- To apply eight basic steps of the health education process to a case study situation.
  (Steps 4, 5)

RESOURCES

Community Health Education in Developing Countries. p. 1.

Handouts:
- 18A Introduction to Health Education
- 18B Health Education Problem
- 18C The Health Education Process

Trainer Attachments:

- 18A Aims of Health Education.
- 18B Illustrating the Health Education Process
- 18C Sample Problem Solution

MATERIALS Newsprint, markers .

PROCEDURE

Trainer Note

The day before this session distribute Handout 18A, (Introduction to Health Education) to all participants. Ask them to read it and be prepared to use this information in their discussion in Step 1.

Prior to the session, prepare a list of good and bad examples of aims of health education similar to the list in Trainer Attachment 18A (Illustrating Aims of Health Education) and follow the suggestions on preparation for that activity.

Adapt the Handout 18B (Health Education Problem) to fit the local situation.

Ask three participants to prepare arrows following the suggestions given in Trainer Attachment 18B (Illustrating the Health Education Process), which they will use in Steps 4 and 5 of this session. Assist them in preparing and conducting that activity.

Step 1
(30 min)

Identifying the Aims of Health Education

Divide the participants into four groups. Give each group five slips of paper with good examples and four slips with bad examples of aims of health education. Explain that each group should come to an agreement on the three examples that best describe the aims of health education. Encourage group members to discuss the ideas about health education that guided their choices of examples. Give them ten minutes for this task. Also, tell them that two representatives from their group will be going through the same process with representatives from another group while the remaining group members observe the discussion.

Call time after 10 minutes and ask the representatives from groups one and two to meet in one place and groups three and four to meet in another. Give them 8 minutes to select the four best examples from those chosen in the first group discussion. Again encourage them to share ideas about health education during their discussion. After they come to an agreement each group should select a spokesperson to present their choices to the larger group.

After 8 minutes ask the spokespersons to report and explain their final selections. Lead a group discussion to select five aims of health education. Summarize the list on newsprint and correct any errors in the final selection. Lead a discussion of what participants learned about health education from others in the groups.

Ask questions such as:

- Have your ideas about health education changed as a result of this discussion?
- How does health education relate to primary health care?

Trainer Note

In the discussion emphasize that health education is an essential component of primary health care. Refer back to Session 5 (Primary Health Care) for the list of the eight essential components and the diagram of the relationship of those components. Note that health education interlinks all those components.

Also emphasize that health education, as a part of primary health care, aims to help communities and individuals become self-reliant in dealing with and preventing health problems. That is, health education is done with people in the community, not for them. People in the community have valuable practical knowledge and skills that should be incorporated in planning and carrying out health education.

This step enables participants to examine their own and others' assumptions about health education as a basis for understanding rather than simply memorizing the definition of health education presented in the next step.

Step 2
(15 min)

Defining Health Education

Post the large version of the definition of health education (see following Trainer Note) and explain that an expert committee for the World Health Organization developed it. Ask them to look at the list of aims of health education that they prepared in the previous step and discuss whether or not the definition goes along with their aims.

Ask the group the following questions:

- Could you use this definition in the community to explain health education to a community health worker?
- What does this definition tell you about your tasks as a health educator?

Trainer Note

As defined by the WHO Expert committee:

> "Health education in primary health care aims to foster activities that encourage people to: want to be healthy; know how to stay healthy; do what they can individually and collectively to maintain health; and seek help when needed."

In the discussion make sure that participants recognize that health education aims to motivate and develop skills as well as knowledge. It is not limited to giving out information about health care. It also aims to insure that people use health facilities when they need them.

Step 3
(20 min)

Examples of Health Education for Individuals, Groups and Communities

Give the participants an individual health problem situation such as the one in the following Trainer Note. Ask them how they, as health workers doing health education, would help the individual solve the problem. What would they do with that person's family? In the community? Ask someone to suggest another health problem and have the participant answer the same questions.

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Trainer Note

Problem	Individual Health Ed.	Family Health Ed.	Community Health Ed.
Four-year old child with ring worm	Refer child to clinic Teach about cleanliness	Counsel on hygiene and disease Home visits	Village committee on sanitation Hygiene campaigns

During the discussion make the point that for effective health education, interventions should take place at all levels. Each person is a part of a family and a community that affects and is affected by that person's illness.

Step 4
(30 min)

Identifying Steps in the Health Education Process

Divide participants into three groups. Distribute Handout 18B (Health Problem Situation).

Also give each group a set of eight arrows prepared before the session. Explain that their task is to use the steps in planning and evaluating steps (written on the arrows) to develop a plan for working with the community to solve the problem through health education.

Suggest that they begin by making a rough outline of what to do, then use the arrows (steps) to develop a more systematic plan. They have to decide in which order to do the steps and be prepared to explain their solution to the other groups. Remind them to keep in mind the aims of health education listed on the wall as they develop their plan. Tell them they have 25 minutes to develop their plan of action.

Step 5
(30 min)

Discussion of Application of Health Education Steps

Reconvene the large group after 25 minutes and give each small group a chance to present their solutions and explain the order in which they placed the steps of the health education process. Ask them to post their arrows in that order. Lead a discussion of the following questions:

- Are there any steps you would like to add or eliminate from the process? Why?

- Did you involve the community in all the steps of the process?
- Is there only one order in which to place the steps of the health education process?
- Did the steps help your group solve the problem?
- What did you learn from hearing the solutions of the other groups?

Close the session by distributing Handout 18C (The Health Education Process) and having the participants discuss what new things they learned about health education.

Explain that they will be looking at each of these steps in more detail in the remaining sessions on health education. Also, tell them that they will be using this planning process to develop a health education project plan, and to design and conduct a specific health education session. Suggest that they begin thinking about projects that they would like to work on during this training program.

Trainer Note

Trainer Attachment 18C, (Sample Problem Solution), gives a rough outline of the kinds of answers you can expect and ideas to suggest if some of the group°s solutions are incomplete.

During the discussion make the point that the steps of the health education process are aids to help organize planning. In actual practice the order is not always clear cut. Sometimes the line between one step and another is not clear either. Often identifying and analyzing problems is done more than once. Broader objectives are set near the beginning of the project. More spectific objectives for activities are set later. Monitoring and evaluation should go on throughout the project.

Session 18, Handout 18A

INTRODUCTION TO HEALTH EDUCATION

Health education is a process through which behavior changes are effected. Health problems are rooted in specific behaviors: changing those behaviors will change a community's health status.

There are two key elements in health education. First, health education involves community problem-solving. Behavior change will probably not occur in programs designed by outside planners; rather, it depends on the direct and ongoing involvement of the community. Community members must identify *their* needs, define *their* problems, participate in identifying program goals, priorities and methods, and share in the development of program resources and activities. This community involvement is the foundation for an effective program.

Second, health education involves community systems. Health problems in developing countries are caused by a complex interplay of many factors. The most immediately apparent may be a lack of information about illness and how health can be protected, a lack of appropriate health services, poor sanitation, malnutrition, and poverty. A health education program must incorporate these and all the other interrelated factors that contribute to the particularhealth problem addressed. Nor can a program be limited to those individuals whose behavior is to be changed. It must also include those friends, family, community opinion leaders and/or institutions that influence the individual's decision to behave in a certain way. For example, a program to stop smoking among teenagers should be directed not only at the individual teen smokers but also at the teen's peer group that exerts pressure to smoke, at the teen's parents who may encourage smoking by their own smoking habits, at advertising agencies that portray smoking as glamorous, at the stores that make cigarettes available to minors, at the social and recreational activities that may foster smoking, etc. In sum, a health education program must incorporate and work with all relevant community systems.

Your role in the health education process will change according to the task at hand. You may be a catalyst initiating awareness of and desire to act on a problem; you may organize a group to address a problem; you may lead group discussions; you may assist people in learning problem-solving skills; you may help locate and mobilize resources; you may teach skills specific to a project. You may be able to develop inter-disciplinary teams -- extension workers, school teachers, health clinic personnel to work on shared problems. Since health problems are integrally related to broader community development issues, work in one sector impacts on all. A team approach can multiply the resources available to a community project as well as establish mutually reinforcing programs of community development and behavior change.

(From: *Community Health Education in Developing Countries*, p.1.)

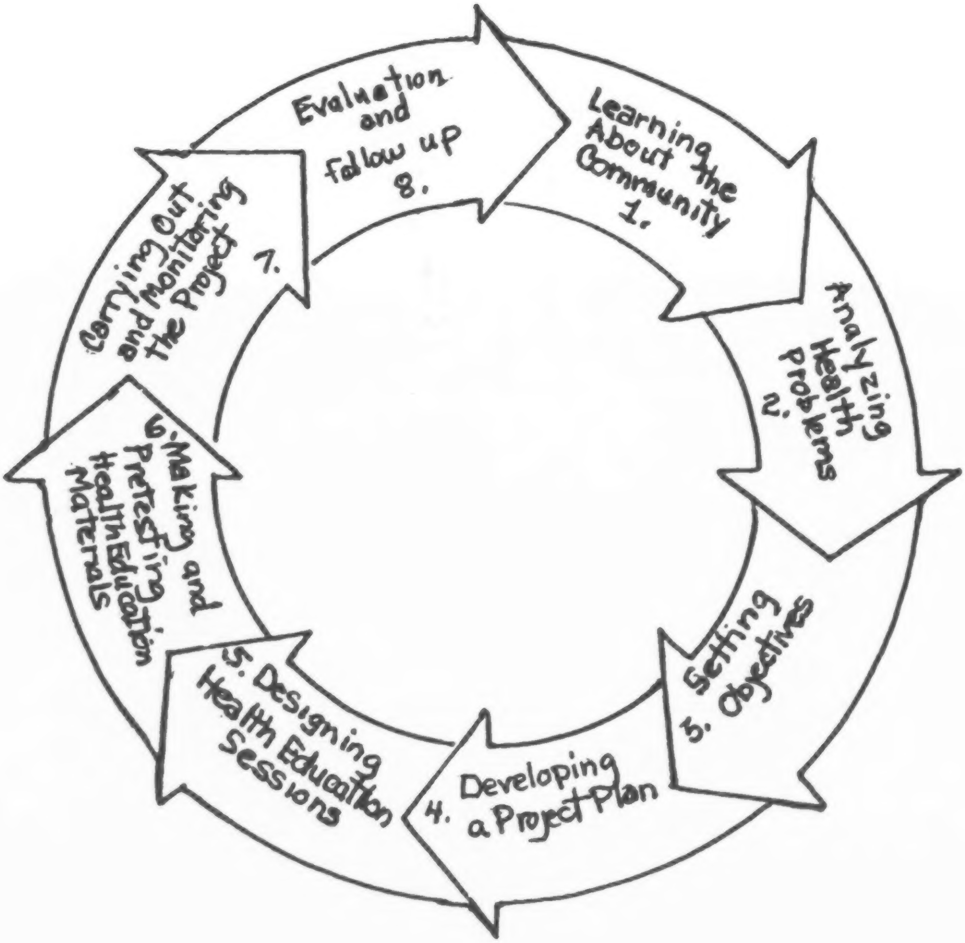
HEALTH EDUCATION PROBLEM

Your task is to use the steps of the health education process to work out a plan for solving the health problem described below. First decide roughly how to solve the problem then use the steps to develop a more systematic plan. Decide the order in which you will follow the steps and be prepared to explain why that is a good order.

The Problem Situation

A health Volunteer has recently arrived at her assigned health post. Her counterpart, a nurse-midwife in charge of the health post, is friendly and pleased to have help, since she is the only health worker in the community. The community has many health problems, particularly infant diarrhea. Many babies have died from dehydration resulting from the diarrhea. Mothers have never heard of mixing and giving sugar salt solution to children with diarrhea to prevent dehydration. Instead they tend to withold food and liquids, including breast milk, when diarrhea begins. Sanitation is poor. The water is collected from a stream in which people and animals walk and defecate. Women also do laundry in the stream. There are no latrines in the community and people see no reason to put scarce resources into building them. Since the water looks dirty, people frequently don't wash their hand before handling food. There is a school in the village. The school teacher is concerned about the health problems in the community and would like to help solve them. Community leaders also recognize the problem of many infant deaths but have never made a plan to do anything about it. Parents are also concerned and fearful that some bad spirits are living among them. The nurse midwife has been keeping records of the treatment and deaths of dehydrated children. There are no vehicle roads leading to the village. People with serious health problems must go to the regional health center (a two day walk) for treatment. There is no electricity. Sugar and salt are available but somewhat expensive. The health post has a few posters and the local school has paper, paint and scissors.

THE HEALTH EDUCATION PROCESS


Learning About the Community 1.
Analyzing Health Problems 2.
3. Setting Objectives
4. Developing a Project Plan
5. Designing Health Education Sessions
6. Making and Pretesting Health Education Materials
7. Carrying Out and Monitoring the Project
Evaluation and follow up 8.

THE AIMS OF HEALTH EDUCATION

Adapt the following examples and copy them on slips of paper for use in the activity described in Step 1. Make sure that all groups have some of the same examples of aims, so they do not debate unnecessarily over equally acceptable aims. You need 20 strips with examples and 16 strips with items that are not examples of aims of health education. Divide these into four piles so that each group gets 5 slips with good examples and 4 slips with bad examples.

The Following are Aims of Community Health Education

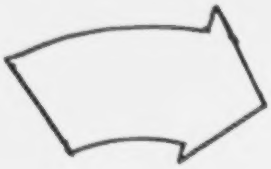
- Helps people become self-reliant in dealing with health problems
- Addresses people's wants, needs, resources and social context
- Works with communities and families as well as individuals
- Considers psychological and social as well as physical well-being
- Contributes to the goals of primary health care
- Encourages people to want to be healthy
- Teaches people how to stay healthy
- Encourages people to seek help from health workers when needed.
- Strengthens health and teaching skills of health workers
- Provides socially and culturally acceptable and relevant health information
- Bases activities on careful planning, monitoring, evaluation, using measurable objectives.
- Emphasizes active participation by learners

The Following are not Aims of Community Health Education

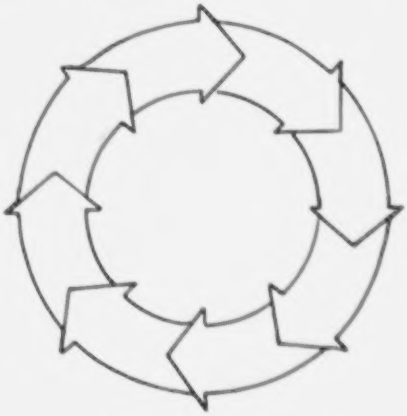
- Communicates health information from experts to the public
- Persuades people to change bad health practices
- Promotes "modern " health technology to replace traditional health practices
- Discourages lay contributions to health care
- Emphasizes treatment rather than prevention of illness
- Distributes posters and pamphlets to as many places as possible
- Promotes a centralized health care service delivery
- Encourages immediate action rather than long-term planning
- Focuses on individuals apart from their social setting.

ILLUSTRATING THE HEALTH EDUCATION PROCESS

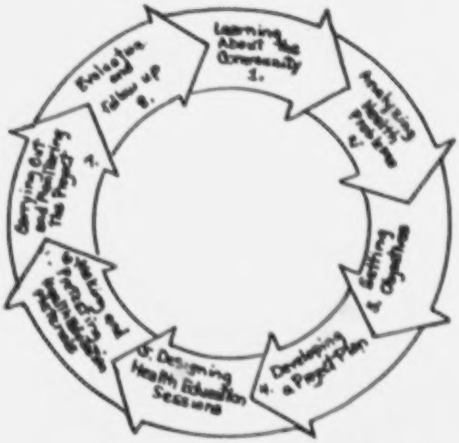
1. Cut out 24 four arrows like the one shown below.



2. Divide them into three sets of eight arrows.



3. Take one set of arrows. Write one step of the health education process on each arrow as shown below. Do not number the arrows.


Learning About the Community 1.
Analyzing Health Problems 2.
Setting Objectives 3.
Developing 4. a Project Plan
5. Designing Health Education Sessions
6. Making and Pretesting Health Education Materials
Carrying Out and Monitoring The Project 7.
Evaluation and Follow up 8.

4. Prepare the other two sets in the same way.

SAMPLE SOLUTION TO THE HEALTH EDUCATION PROBLEM

Step 1 Learning About the Community

__What Happens__
Learn about community problem goals, local conditions, leadership, lines of communication.

__Who Does It__
Health workers community leaders and others.

__Outcome__
Summary of health problems in the community.

__Example__
A health volunteer newly arrived at a rural health post, talked with her counterpart, the nurse-midwife in charge of the post, local leaders, and other people in the community about their perceptions and beliefs about health problems in the area. She looked around the area and saw dirty water sources, no latrines, and found that people did not wash their hands before handling food. She also learned about how to behave acceptably in the village, styles of communication, and what kinds of topics she could discuss with whom. She looked at records in the health post and found many cases of infant diarrhea and deaths from dehydration.

Step 2 Identifying and Analyzing Health Problems

__What Happens__
Identify priority problems. Determine the probable behaviors and conditions causing the problem. (Who has the problems? Who else is affected by it? Who perceives it to be a problem? When is it a problem?)identify which can be changed by health education and who should be involved.

__Who Does It__
Health workers, community leaders, and others.

__Outcome__
List of priority problems.

__Example__
She discussed her observations and conversations with her counterpart and they decided to meet with the local leaders to discuss the problems. The leaders and the health workers listed problems and identifying those most important to the community and most likely to be solvable using community resources. They decided that poor sanitation in the community was a long term project that needed action but would not provide immediate results.

They also decided that the problem of infant deaths from dehydration due to diarrhea was a problem resulting from poor sanitation that could be reduced in the short term by teaching mothers to give sugar salt solutions whenever children have diarrhea. Mothers neede to learn to change. The harmful practice of withholding liquids during diarrhea (add other examples of local practices).

Step 3 **Setting Objectives**

What Happens

Set measurable objectives, assess potential obstacles and revise objectives.

Who Does It

Health worker and others in the community.

Outcomes

Measurable objectives

Example

The health workers and local leaders set the following objectives to solve the problems identified.:

- To reduce infant mortality from dehydration by 60% (within one year).
- To teach and motivate 60% of the child care takers (mothers, grandmothers, older siblings) to correctly mix and use sugar salt solution when children have diarrhea (within six months).
- To teach 60% of the families to build and properly use latrines (within two years).
- To teach and motivate 60% of the families in the community to wash hands before handling food.
- They discussed the problem of lack of uniform measuring utensils for the sugar and salt solutions and decided they could overcome this by teaching mothers to use certain size glasses and a bottle cap to measure.
- They discussed the lack of good clean water supply making it difficult to practice good hygience and agreed that this obstacle required additional resources that the community would have to gather.

Step 4 **Developing a Project Plan**

What Happens

Decide what community organization, training and communication is needed to accomplish objectives.
Analyze resources available to carry out the objectives.
Identify and schedule specific activities
Develop a plan to monitor and evaluate the project

Who Does It

Health workers,leaders and others in the community.

Outcome

Health Education Project Plan

Example

The community leaders and the health workers decided that a community health committee was needed to carry out and monitor this project. They also decided to conduct health education demonstrations on mixing sugar salt solution, to teach school children about personal hygiene and to have a community health fair focused on cleaning up the community, and stimulating interest in building and using latrines properly. A demonstration and help in latrine building was the activity planned. They also developed a plan to monitor and evaluate the project. They worked out how most of the costs could be covered by the community, scheduled these activities, and assigned responsibilities,

Step 5 **Designing Health Education Sessions**

What Happens

Develop objectives and activities for health education sessions. Identify materials and equipment needed, assign responsibilities. Develop a plan to evaluate sessions.

Who Does It?

Health Committee, Health workers, communitee memebers

What Outcome?

Session plans, work plan identifying responsibilities, session evaluation plans.

Example

The health committee worked out a design for each event in the project plan. They decided how they would determine whether the sessions were working well. The health committee held a town meeting and presented their idea to improve community health by a health day and health education activities on to have healthy children. They recruited volunteers for the latrine building project and promises of small donations for supplies.

Step 6 **Preparing and Pre-Testing Health Education Materials and Techniques**

What Happens

Locate or prepare health education materials. (visual aids)

Pretest materials and techniques.

Adapt materials based on pretest.

Who Does It

Health worker and/or artist working with the community members.

Outcome

Pretested, revised materials.

Example

The nurse midwife, the health Volunteer and the school teacher had agreed to take responsibility for conducting health education activities in the community and school. The teacher assigned the older school children a project to develop posters on hygiene and sanitation. The Volunteer helped them pretest the materials in the community. The younger children developed a puppet show.

Step 7 Carrying out and Monitoring the Project

What Happens

Carry out the project plan and session plans. Monitor the project. Modify activities and materials as needed.

Who Does It

Community members with the help of health workers.

Outcome

Activities carried out.Plan modified to improve project

Example

The health committee started off the project with the health fair, and involved many community members in the preparations.The people responsible for specific sessions worked with the health Volunteer increase their communication skills and learn more about health topics. The health Volunteer and the nurse-midwife attended the sessions and served as resource persons for health questions. At the end of each session time was left to ask participants what they learned from the session and how they could use it. The health Volunteer and the nurse-midwife did home visits throughout the project, following up on health education sessions, anwering questions and assessing how well the learners had mastered mixing sugar-salt solution when needed and were practicing good hygiene.

Step 8 Evaluation and Followup

What Happens

Observe, interview, look at health records to determine:

- Were objectives accomplished?
- Did causes of the problem change?
- Was the problem solved?
- How could the project plan be improved?

Who Does It

The health committee with assistance from the health workers

Outcome

- Follow-up activities to accomplish objectives.
- Ensure long lasting improvement in health.
- Revised project plan and session plans.

Example

At the end of one year the health committee assessed how well they had accomplished their objectives for that time period, and modified their plan based on their findings. They found that some mothers were not using sugar salt solution correctly and many people were not maintaining their latrines properly. Others had not built latrines.

The water shortage continued to make it difficult to practice good hygiene even though they knew what to do.

The health worker visited mothers in the home to review mixing the special drink (salt-sugar) and the school teacher worked with the children on how to teach other children about the special drink.

The village leaders worked with the volunteers to form a water committee to collect funds to improve one water supply and get technical assistance from the water and sanitation division of the regional office of the ministry of health.

Session 19

IDENTIFYING AND ANALYZING PRIORITY HEALTH PROBLEMS

TOTAL TIME 3 hours, 15 minutes

OVERVIEW

In Sessions 10-13, participants gathered and analyzed information about community development problems related to health (Step 1 of the health education process). This session focuses on Step 2 of the process: health problem identification and analysis. Visitors from the local community discuss local health problems. Applying insights gained in Session 8 (Factors Affecting Health), participants and visitors from the community identify practices associated with the health problems. They consider potential causes of the problems and related behaviors. They also identify health practices and categories of individuals that can be affected by health education. This information will provide the basis to write health education project objectives in the next session.

OBJECTIVES

- To identify a priority health problem.
(Steps 1, 2)
- To analyze the conditions and practices affecting that problem.
(Steps 2, 3)
- To identify health-related practices that can and should be changed or reinforced through health education.
(Steps 3, 4)

RESOURCES

- Helping Health Workers Learn, Chapter 7.
- On Being in Charge, pp. 278-283
- Community, Culture, and Care

Handouts:
- 19A Defining the Health Problem
- 19B Health Problem Analysis Worksheet

Trainer Attachment:
- 19A Selecting Important Health Problems
- 19B Examples for Problem Definition Activity
- 19C Identifying the Target Group
- 19D Sample Pictures for Discussing Health Problems

MATERIALS Newsprint, markers

PROCEDURE

Trainer Note

Prior to the session, invite a few people from the local community or training center staff to attend this session to share their ideas and experiences regarding local problems, beliefs and behaviors that affect health. Their participation is essential to emphasize the importance of community involvement in any project development.

Prior to the session, distribute and ask participants to read Handout 19A (Defining the Health Problem). Also ask them to read Chapter 7 of Helping Health Workers Learn (Helping People Look at Their Customs and Beliefs). Explain that in Session 19 they will have the opportunity to learn about local health problems from visitors from the local community. Emphasize that it will be their responsibility to ask the questions necessary to gather this information in a culturally appropriate way. If necessary, arrange for an interpreter for the session.

Ask them to also read Chapter 13, page 4 and Chapter 26, pages 20-22, of Helping Health Workers Learn and be prepared to stimulate discussion about community health problems using pictures such as those in Trainer Attachment 19D (Sample Pictures for Discussing Health Problems.)

Step 1 (30 min)

Recognizing Health Problems

Introduce the session by explaining that often it is difficult to identify problems. Frequently people confuse solutions with problems.

In this session they will first practice identifying problems then they will help local community members identify priority health problems. Give an example to illustrate the difference between problems and solutions.

Post your list of example problems (based on Trainer Attachment 19B, Examples for Problem Definition Activity). Ask participants to identify which items on the list are actually problems. Have someone check these. If an item is not a problem, the participants should specify what is the true problem.

Discuss each potential problem on the list together as a large group and add to the list, the real problems underlying the items identified as not the real problem.

Trainer Note

Use Trainer Attachment 19A (selecting Important Health Problems) as background for guiding this discussion.

The following example illustrates the distinction between problems and solutions. A health worker visited a village where many children were suffering from diarrhea, decided that the problem was lack of latrines and organized a latrine building campaign to solve the problem. You can use the following questions to clarify the distinction between problems and solutions in this situation:

- Did the health worker define the real problem?
- What was the real problem?

Participants should respond that the real problem was intestinal diseases such as diahrreal diseases and worms transmitted by feces. Recognizing this as the real problem, latrines are only part of the solution. Also important are protection of food and personal hygiene and oral rehydration therapy for children with diarrhea.

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Step 2
(15 min)

Introducing the Health Problem Analysis Work Sheet

Distribute Handout 19B (Health Problem Analysis Worksheet). Give an example (similar to the example in Trainer Attachment 19A) illustrating how to fill in the sheet. Allow time for questions and discussion of the sheet. Modify the items on the sheet if necessary.

Trainer Note

Explain that the worksheet provides step-by-step instructions for their group work during this session so they need to be sure they understand the task. Tell them to record their conclusions on a large sheet to use in their report for the larger group.

In brief, they will be:

- Identifying one priority health problem.
- Discussing the causes of the problem
- Identifying things local people do that affect the problem positively or negatively.
- Decide who should be the target group for health education.

Trainer Attachment 19C (Identifying the Target Group) provides background information to help you explain this to the participants.

Step 3
(90 min)

Analyzing Community Health Problems

Welcome the Visitors from the community and thank them for their interest in the training course. Divide participants into three or four groups so that there is at least one visitor in each group.

Ask participants to use the pictures they prepared to stimulate discussion about health problems and practices in the community.

Have them follow this discussion by filling in Handout 19A (Health Problem Analysis Worksheet) with the community visitors so that they can present the results to the larger group.

Step 4
(45 min)

Reporting on Problem Analysis

Ask people from each group to report what they learned from working together to complete the form,using their large summary sheet.

Close the session by telling the group they will use the results of this discussion to develop health education objectives during the next session.

Trainer Note

By the end of this discussion you will have the following information:

- Behaviors affecting the health problem categorized as harmful, harmless or beneficial.
- Identification of behaviors that can be changed through health education.
- Ranking of behaviors in terms of priority for change.
- Ideas about groups and individuals with whom to begin working to encourage beneficial behaviors and change harmful behaviors.

DEFINING THE HEALTH PROBLEM

The first requirement in bringing about change is for people to agree that there is a problem and that something should be done about it. The challenge is to avoid simply looking for things which the people do which are unhealthful. Search for the meaning of existing practices. For example, you may find that the community women use the banks of the river or pond for toilets and you may try to convince the community to build and use household privies. This effort could easily fail if a new means is not provided for the women to meet and chat each morning, such as at a protected well site.

To say that there is a health problem is a very general statement which covers many specific situations. In order to plan your work, to set goals and to go into action, you must be able to define the specific problem on which you wish to work.

To help you define it and involve the community in doing so, talk with the local leaders and villagers. Use a questioning approach in an attempt to find out how they view the health situation. Start from the general and work down to the specific problems you have in mind. For example, if you found a very unsanitary environment in your survey of the community you might contact the leaders and proceed as follows:

1. "What kinds of things need to be done in this village?"

2. "What are the illnesses most common in this village?"

3. "What do people die of, mainly?" "Are there many children under 5 years old dying? If so, what from?"

4. "Do they have diarrhea, dysentary, cholera, typhoid, worms in this village?" "What causes these illnesses?"

5. "Are there any latrines in the village?" "What do people use?"

6. "Has any thought been given to building latrines?"

7. "Why would some people refuse to use them?"

8. "If these diseases could largely be stopped if the people themselves decided they wanted to, would people in the village want to plan together to do away with diarrhea, dysentary, cholera, worms, etc.?"

The problems you have already uncovered in the formal village survey can be compared with the views expressed informally through this type of questioning. In fact, much of the essential information may have already been gathered while you were first getting acquainted with the community.

The place for further problem identification and definition is with the Health Committee. Here are a few steps to help the Committee define specific health problems.

- What is the nature of the problem? What is the problem situation, behavior or condition?
- What is the extent of the problem? How bad is the situation? How significant is the problem in terms of the community?
- Whom does the problem affect? What groups or individuals are affected?
- What are the size, the characteristics and the nature of the "target" group?
- Where does the problem occur? What geographic area is affected? What is its size and nature?
- How long has the problem existed? Is it improving or not?
- How much would people be willing to contribute in work, money, land for a well, sand for concrete, labor, etc.?

(Community Health Education in Developing Countries. pp.19-29.)

HEALTH PROBLEM ANALYSIS WORKSHEET

1. Identify priority problems that affect health
   a) List four health problems.
   b) Ask the four questions listed below for each health problem.

Health Problems

______________________________ 1. Does it affect many people? (Is it a common problem?)

______________________________ 2. Do many people feel it is a problem? (Is it widely recognized as a problem?)

______________________________ 3. Does it cause many deaths or serious illnesses? (Is it a serious problem?)

______________________________ 4. Can it be solved using community resources?

   c) Select the highest priority problem.
   (Make certain answer to question 4 is yes.)

2. Look at the causes of the problem, particularly things that people in the community do, that affect the problem to increase it or decrease it.

- Fill in the answers to the questions in the blanks below.

Priority Problem	What Causes It?

3. Who does things that help reduce the problem?
What are some reasons for these practices?
Which practices are most important to encourage? Why?
How can we encourage these people to continue those practices?

Helpful Practice	Who does this?	Can We Encourage Them? How?

4. What kinds of practices increase the problem? Who does these things?
Which practices have the highest priority for change? (which have most effect on the problem and are most likely to change through health education?)
Can we change these people's practices? How?

Harmful Practice	Who does this?	Can We Change this Practice? How?

5. What groups and individuals can we work with in the community to help these people change harmful behavior and encourage helpful behavior.

Groups/Individuals	How They Can Help

6. Summarize your conclusions on a large sheet of newsprint so you can share them with the other groups.

SELECTING IMPORTANT HEALTH PROBLEMS

What is a problem?

Here are two useful definitions of a problem:

- *A problem is a difficulty or obstacle seen to exist between a present situation and a desired future objective.*
- *A problem is a perceived gap between what is and what should be.*

It is important to recognize that people look at (perceive - feel about) problems differently.

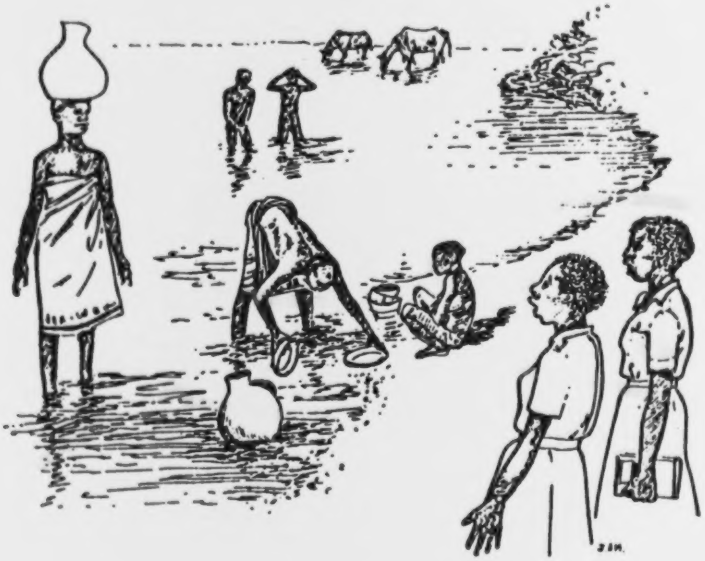
For example:

A village has a contaminated water supply, which may be resulting in outbreaks of diarrhoea.

That is a situation.

If the villagers do not recognize that the water is contaminated or that it is responsible for diarrhoea, then, to the villagers, this situation is not a problem.

But the health worker 'sees' or 'perceives' the gap between what is and what could be. This gap is a problem, to the health worker.



A 'problem' as seen by a health worker

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It is important to define a problem clearly; otherwise an attempted solution may be wrong. Many health problems have several causes. It is easy to mistake a cause for a problem; then one cause may be removed without solving the problem.

Consider the following:

1. Many people have diarrhoea
2. The well-water is contaminated
3. There are too many flies
4. The sanitation is poor
5. The people need health education.

Which is the problem?

The problem is 'many people have diarrhoea'. Statements 2, 3 and 4 are possible causes of the problem.

If the problem is stated as 'sanitation is poor', and the effort at solving the problem is concerned only with improved sanitation, the diarrhoea will NOT disappear. It may be spread by flies or contaminated water.

In analysing problems:

define what the problem is
find all possible causes of the problem
look for ways to remove causes.

To select important problems is useful to group all the problems under the following headings:

Diseases or health problems
e.g., Malaria
Malnutrition
Repiratory diseases
Diarrhoea

Health service problems
e.g., Insufficient drugs
Lack of qualified personnel
Difficulty in visiting outlying areas

Community problems
e.g., Inadequate water supply
No primary education
People have to go a long way for health care
Poor harvest two years running
Male population leaving the land to work in industry

The health worker is always faced with more than one problem at a time and cannot solve all of them at once. So the problems are studied and the most important are given priority; i.e., these problems will be tackled first. Resources will be used mainly for these problems.

When attempting to select priority problems one must look carefully for the real causes especially for purposes of health programme planning. Many health problems could best be cured by more and better food, clean water, education, and solid safe housing. When seeking information it is important to look also outside the health field.

One way to determine problem priorities is to set criteria. A criterion is a principle or a standard by which one can measure or judge something. A set of criteria may be listed to form a check-list such as the following:

Does the problem:

- affect large numbers of people, e.g., malaria, leprosy?
- cause high infant mortality, e.g., malnutrition, neonatal tetanus?
- affect maternal health, e.g., complications of pregnancy, multiple pregnancies, post-partum haemorrhage?
- affect children and young persons, e.g., tuberculosis, road accidents, home accidents?
- cause chronic conditions and handicap, e.g., blindness, trachoma, poliomyelitis?
- affect rural development, e.g., river blindness, sleeping sickness?
- cause worry to the community?

If the answer to any of the above questions is YES, the problem is a priority one.

A problem may receive priority attention also if there is a simple way to deal with it.

Example of a list of Community Problems (applying Step 2)

After reviewing all the information available a number of problems will emerge. A typical list might read as follows:

Diseases and health problems

Malaria
respiratory infections
diarrhoea
complications of pregnancy and labour
eye infections
insect and snake bites
low birth weights of infants
leprosy
tuberculosis
hepatitis
skin infections
ear infections
malnutrition
(and so on, according to the area).

Other problems that may emerge:

Communications

Bad roads
seasonal bad weather
avalanches, etc.
inadequate transport
flooding

Health services

- Health personnel do not go out to the community
- lack of material for dressings and treatments
- insufficient staff
- insufficient drugs
- inadequate working conditions
- lack of transport.

Other problems affecting health

- Illiteracy
- lack of sanitation
- contaminated water supply
- bad and overcrowded housing.
- rodents, and animals roaming freely
- drought
- unemployment

To choose priority problems from the above list apply the selection criteria on page 280. the more important problems will become obvious, e.g.,:

Health problems
- Complications of labour
  - Low birth weight of infants
  - Malnutrition

Health service problems
- Insufficient visits to the community
- Lack of transport.

Community problems
- Lack of sanitation.

Note: Many problems are outside the health sector but are important because they affect health. The health worker can get health education of the people as a priority, to inform them about those problems and teach them how to prevent and overcome them. He may cooperate with the teacher in the school, or with the literacy programme, to prepare material so that people learn about health at the same time as they learn to read.

Contaminated water or, in some areas, lack of water are not problems the health worker can tackle alone. He can get in touch with the responsible people and cooperate with them. He must consider all this when he makes a plan of work. This may include, e.g., education of, and participation with, the community in a latrine-building programme or water conservation in the home.

The District of Vosokcham

Nurse-Midwife Shireen has collected and analysed information in this district.

She notes that complications of pregnancy and delivery are high on the list of problems. She knows that the government is concerned about the number of women dying during childbirth, as well as the number of children born dead or dying soon after birth.

The national objective to reduce maternal mortality by providing antental care and increasing health coverage of pregnant women is being emphasized at the middle level of the health service throughout the country.

After deciding that complications of pregnancy and delivery are priority problems in her district Nurse/Midwife Shireen begins to organize an antenatal programme.

The district of Vosokcham is divided into three health sectors: "A", "B", "C". She begins in Health Sector "A".

Note that the approach taken closely follows that taken by Maria in the example given in the Introduction to this Part: that is, she includes the community in planning and programming, as explained in the following chapters.

SUMMARY

AT THE COMPLETION OF STEP 2 THERE SHOULD BE A LIST OF THE IMPORTANT PROBLEMS OF THE COMMUNITY

- CLEARLY DEFINED - WITH POSSIBLE CAUSES, OR
- ANALYSED IN ORDER OF IMPORTANCE.

(From: WHO. On Being In Charge.pp.278-283.)

EXAMPLES FOR PROBLEM DEFINITION ACTIVITY

Write some examples such as the following on newsprint and ask participants to check those that are real problems. For those that are not checked, ask them to explain what might be the true problem.

1. Lack of latrines
2. Malaria
3. Mobile health teams never visit
4. Too many flies
5. Women deliver babies at home
6. Domestic animals run loose
7. Intestinal worms
8. There is no doctor
9. People drink too much alcohol
10. There are no vaccines for children

Numbers 1, 3, 4, 5, 6, 8, 10 are not true problems.

Handout 19A (Selecting Important Problems) also discusses how to identify true problems.

(From School of Public Health, The University of North Carolina at Chapel Hill. Practical Training in Health Education [Manual for Cameroon])

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IDENTIFYING THE TARGET GROUPS FOR HEALTH EDUCATION

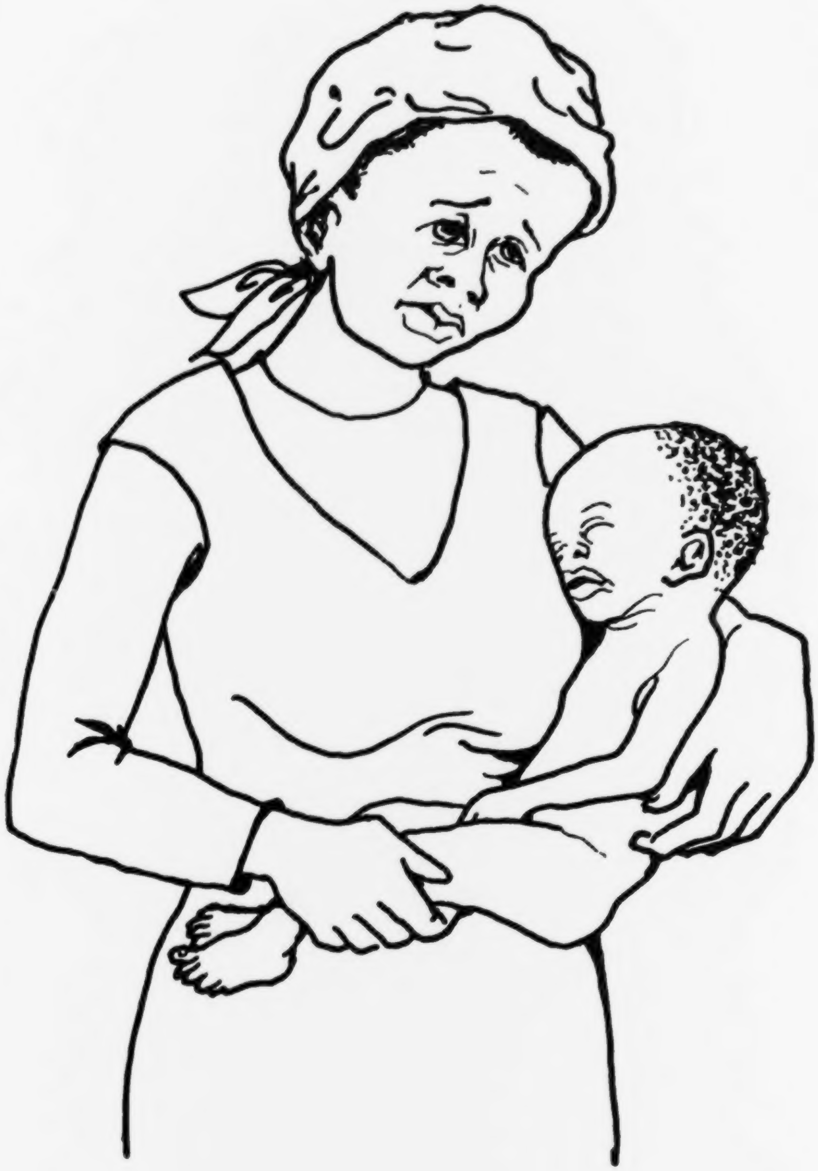
After defining a health problem it is fairly easy to identify the group of people affected by the problem or at risk for being affected by the problem, These people should be the target for most of the health education interventions. They should also be the primary group involved in planning of health projects. Sometimes there are others, not directly affected by the problem, who have strong influence over the affected group (for example, parents, teachers, religious leaders, spouses). These people should also be encouraged to participate in planning and carrying out of the project

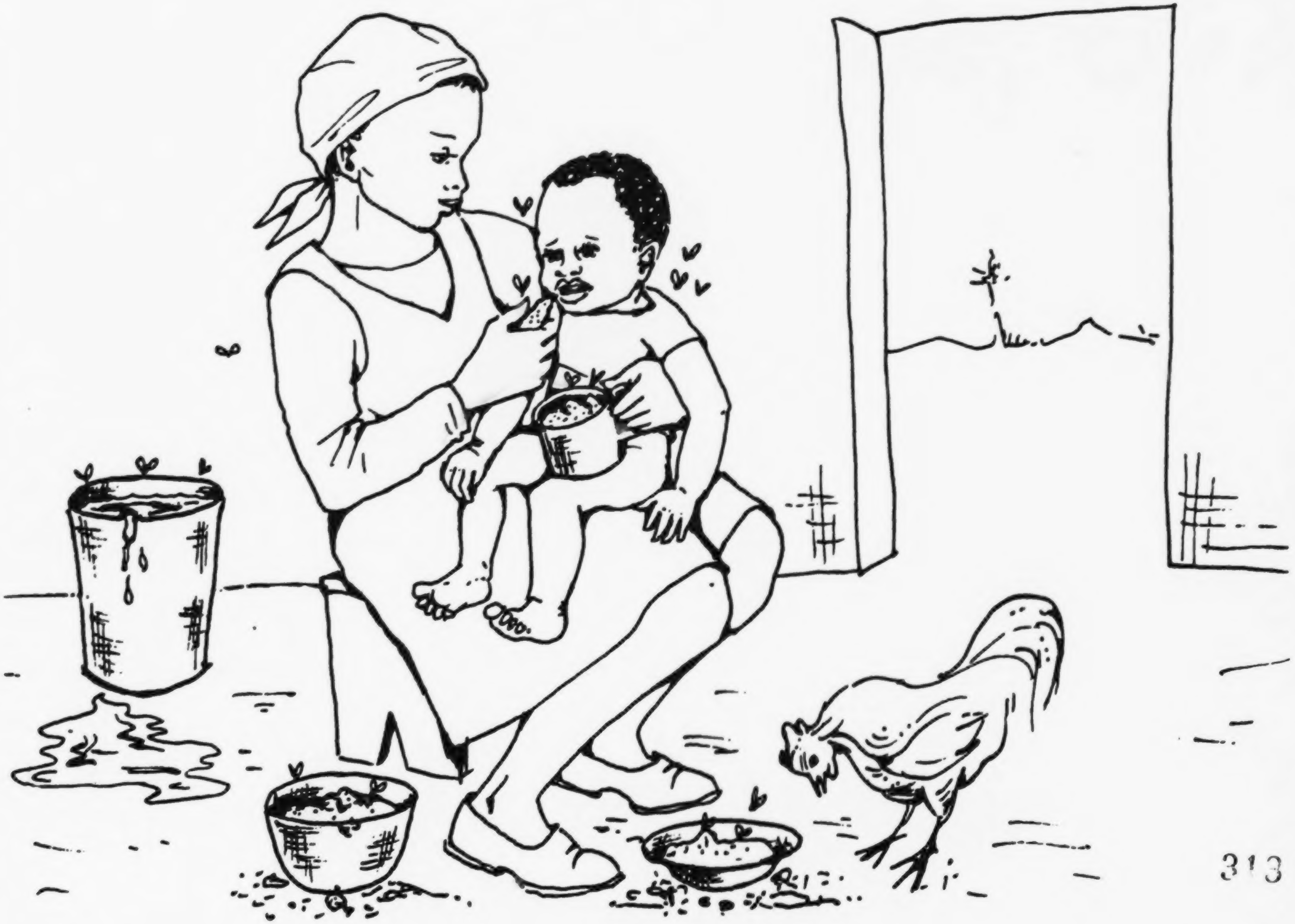
Primary target group: the people affected by the health problem

Intermediate target group: the people who control who controlneeded resources for health behavior and who can inform and motivate people to adopt healthy practices.

(Based on L. Green. Guidelines for Health Education in Maternal and Child Health. p.10.)

SAMPLE PICTURES FOR DISCUSSING HEALTH PROBLEMS





(MEDEX: Illustrations for Training Community Health Workers. pp.7, 14.)

Session 20

WRITING OBJECTIVES FOR HEALTH EDUCATION

TOTAL TIME 2 hours

OVERVIEW

Once the community and health educator identify priority health problems, assess behaviors associated with those problems, identify key factors contributing to those behaviors, and select target groups, the next step is to write objectives. These objectives state, in measurable terms, what the target persons or groups will do as a result of health education interventions. In this session participants focus on writing clear, relevant, feasible, objectives for health education projects. Where national or regional health programs exist for the project topic area, participants develop project objectives that contribute to those program goals and objectives, which were discussed in Session 6 (Health Care Delivery Systems).

OBJECTIVES

- To write measurable objectives for health education interventions, based on community information, and contributing larger health program objectives.
(Steps 1, 2)
- To critique health education objectives based on feasibility, relevance, clarity and whether they can be observed and measured.
(Steps 3, 4)

RESOURCES

- *On Being In Charge*, pp. 288-295
- *Community Health Education in Developing Countries*, pp. 21-26.

Handouts:
- 20A Setting a Project Goal and Objective
- 20B How to Write Objectives
- 19B Health Problem Analysis Worksheet (From Session 19)

Trainer Attachments:
- 20A Examples of Complete and Incomplete Objectives
- 20B Examples of Objectives for Programs, Projects and Activities
- 20C Reviewing Obstacles and Limitations

MATERIALS Newsprint, markers.

PROCEDURE

Trainer Note

Prior to the session adapt the examples of Health Education Objectives (Trainer Attachments 20A and 20B) to fit participants' interests and local conditions. Read Handout 20B (How to Write Objectives) as background for Steps 1 and 2 of this session. You can also refer to the Training of Trainers Module, Combatting Communicable Childhood Diseases Training Manual (Peace Corps), for more detailed discussion of behavioral objectives for training courses and workshops.

Distribute Handout 20A (Setting a Project Goal and Objectives) and ask participants to read it before the session.

Ask a volunteer to prepare to lead the discussion in Step 4 by reading Trainer Attachment 20C (Reviewing Obstacles and Limitations).

Step 1
(20 min)

Discussion: What Is a Good Objective?

Introduce the session by noting that even though people agree that a problem exists and is important, they are unlikely to solve the problem unless they can agree on what action to take. Agreeing on measurable objectives is the best way to start developing such a plan of action. In this session they will practice writing and critiquing objectives. To do this they need some standards for good objectives.

Use Trainer Attachment 20A (Examples of Complete and Incomplete Objectives) as a model for writing complete and incomplete objectives on the board, based on problems similar to those identified in the previous session. Write a good and bad version of the same objective and ask participants which one they would use if they were planning a project on that topic. Ask them to explain their selection.

Use the outcome of the discussion to develop a list titled "What Makes a Good Objective?". Some questions you can use to guide the discussion are:

- Why is it important to state, in measurable terms
- What you expect as an outcome of the project?
- What kind of information do you need to include in the objective?
- What do you do with a clear, measurable objective that is impossible to achieve?

Trainer Note

The conclusions about what information belongs in an objective should include:

- What needs to change?
- How much change?
- For whom ?
- Where will the change to occur?
- When? By what time or date?

The standards for identifying a good objective should include:

- Measurable (based on behavior)
- Relevant (related to the problem at hand)
- Feasible (has a reasonable chance for success)

Be sure to have the group go through several project level objectives looking for what, how much, whom, where, and when. For the same objectives ask if they are measurable, relevant and feasible.

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Step 2 (15 min) **Identifying Objectives for Different Levels of the Health System**

Use Trainer Attachment 20B (Examples of Objectives for Programs, Projects and Activities) to:

- First, write a national level program objective and ask participants to assess whether this is a good objective.
- Second, write a community level project objective that contributes to accomplishing the national program objective. Ask them to assess whether that example is also a good objective.
- Third, write an objective for one health education session or activity that contributes to achieving the project objectives. Ask them if this is a good objective.
- Finally, ask someone to explain how the three kinds of objectives relate to each other.

Trainer Note

As a result of this discussion participants should explain that the statements are all objectives that fit the standards just discussed. The kind of information given for "what, who, and how much" differs with the level of health education intervention. Activity objectives are stepping stones toward accomplishing projects. Projects contribute to achieving program objectives.

For example, in an objective for the national or regional level (for a program), "how much" often refers to a number of people or a percentage of the population expected to change in behavior and/or health status. At the individual level (for specific health education sessions) it refers to the level of accomplishment for specific skills, knowledge, organization, or changes in attitudes and behavior.

Direct the focus of this session on writing project objectives. Participants need to be aware of existing program objectives but they are unlikely to be involved in writing them in their work.

Make the point that the objectives for specific activities in health education interventions refer to the specific skills, knowledge, attitudes or organization needed to accomplish the project objective. This provides a guide for what kinds of health education techniques and methods are needed to acquire what is needed to meet the objective.

Be sure the group understands that every objective, whatever the level, answers the question, "Who is expected to do how much of what where, by when?"

Step 3
(45 min)

Practice Writing Objectives

Ask participants to use the information on Handout 19B (Health Problem Analysis Worksheet) and what they learned about national and regional health programs in Session 6 (Health Care Delivery Systems) to write a project objective that:

- meets the standards for good objectives, just discussed and
- contributes toward accomplishing the goals of an ongoing health program if one exists for the project topic area.

Give them 15 minutes to do this. Encourage them to ask for help from you or other participants if they have difficulty.

After 15 minutes ask one person to write their objective on newsprint. Have the group review it to see if it meets the standards of a good objective.

Then ask everyone to exchange their objective with a person next to them. Ask them to review their partner's objective to see if it meets the standards, and explain their conclusions to their partner. Circulate around the group while they are doing this, to answer questions and make sure that the reviewers are applying the standards for a good objective and considering whether the objective contributes to the national program objective.

Trainer Note

To make the task easier for participants, you may want to prepare a summary of national health program objectives related to the health problem areas identified in Session 19 (Identifying and Analyzing Health Problems) and post it for reference during this step.

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Step 4
(30 min)

Reviewing Obstacles

Have the pre-assigned person lead a discussion on how to identify obstacles to achieving objectives based on Trainer Attachment 20C (Reviewing Obstacles and Limitations). Make sure that they select one or two of the objectives and demonstrate how to identify potential obstacles and have participants discuss how the objectives should be revised based on the conclusions about obstacles and limitations.

At the end of the session give participants an opportunity to ask questions about writing good objectives and encourage everyone to revise their objectives if necessary based on their analysis of potential obstacles.

Explain that they will use these objectives in the next session.

SETTING A PROJECT GOAL AND OBJECTIVES

People can agree that a problem exists and is important and still not solve it. This can happen even if everyone agrees that something should be done. People must agree on what they will do about a problem.

A project will not succeed unless it has goals which are based on the problems agreed upon and defined by community representatives. The goals for a project are taken from the important health problem identified in the community. For example, if the problem identified was too many people sick from amoebiasis, the goal would be to reduce the occurrence of amoebiasis in the community.

From the goals of the project objectives, a Plan of Action, and evaluation methods will be developed and will allow you to assess a change. For example, merely to say "To improve sanitary conditions" leaves you no means with which to determine your achievements. If you had said "To install 35 latrines" you would then have some means of objective evaluation.

In completed form, an objective correctly written might appear like this:

What → The number of sanitary latrines used

Who → By Families

How much → will increase by 25%

Where → in Community Y

When → in the next three months

You will note that this objective has been written in *behavioral terms*, i.e., privies will be used. Obviously, just having such facilities can be misleading. You can also write educational goals in terms of the numbers of people who will understand or believe certain things. Once you have some baseline data, you can also measure increases in healthful attitudes or behavior.

Two further points in relation to defining the goal and current writing objectives must be taken into consideration. First, they must be related to the problem at hand. For instance, if the current problem under consideration is an unsanitary environment, then the promotion of the construction of a school would not be a goal relevant to the problem. That is, achievement of the goal would have little, if any, effect on the problem.

A final point is that the goal be possible to achieve. There should be a reasonable chance for success. If, for example, the community cries for the assignment of a doctor to their village and you know that the priorities are for preventing disease and that there is a great shortage of available doctors, then why attempt it? Point out these facts to the leaders and consider more realistic goals. If the goal is impossible to achieve from the outset, then embarking upon the project will only lead to failure and lose for you the trust and cooperation of the community you worked so hard to gain. Consider your resources and obstacles. Be realistic. Start with goals which can be achieved.

It is true that many goals take longer to reach than others, but this alone should not be grounds for dropping them. "Long-term goals" may take as long as five years or longer to achieve. Usually, on the path toward reaching them, you will find several sub-goals or "short-term goals." These are the stepping stones to a larger goal; they can be considered projects in themselves.

For example, the problem encountered may be the high rate of tuberculosis cases in the community. The long-term goal might be a decrease in the morbidity rate (number of cases). But there are several approaches: treatment of existing cases, prevention of new ones, or education about the disease. Any one of these could be considered a short-term goal. Short-term goals are usually more specific and, as their name implies, involve projects of short-term duration. So, remember. Whether it be a long-term goal or a short-term goal, the goal and its objectives must be:

1. *Measurable*

2. *Relevant*

3. *Possible to achieve*

Now that the community has identified and defined a problem and has set goals, what do you want the outcome of your efforts to be? The answers to the following questions will allow you to set the objectives which must be achieved in order to accomplish your goal. Each objective should describe specific changes that must be achieved to accomplish the goal of the project:

- *What* do you want to change?
- How *much* change do you want?
- *For whom* or *for what* do you want the change?
- *Where* do you wish the change to occur?
- *When?* By what time or date?

All of these questions must be answered at the outset of the plan for change so that you will be able to check your progress along the way. These objectives must be *measurable*.

(From: Community Health Education in Developing Countries. pp. 21-22)

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HOW TO WRITE OBJECTIVES

Objectives should be expressed in terms of outcomes. Each objective should answer the question, Who do you expect to do how much of what by when and where?

Who:	target groups or individuals expected to change
What:	the action, change in behavior or health practice expected.
How much:	the extent of change expected (such as number of people with improved health status).
When:	when desired condition will be accomplished
Where:	place in which change will be observed (usually implied within the specification of who)

The following steps will help you write complete objectives:

1. Writedown WHO is the subject of the objective. For example: Mothers of infants between nine months and one year old.

2. Write out WHAT the job or task that will be done, or the change expected: Mothers of infants between nine months and one year old will have them vaccinated for measles.

3. Add HOW MUCH quantity, quality and/or time standars that apply to the objective: 80% of the mothers of infants between nine months and one year old will have them vaccinated for measles.

4. Add WHEN this will occur: 80% of the mothers of infants between nine months and one year old will have them vaccinated for measles at nine months of age.

5. Add WHERE this will occur: 80% of the mothers of infants between nine months and under one year old will have them vaccinated for measles at nine months of age at the community health post.

(Adapted from: Michalak and Yager, Making the Training Process Work. pp. 67-72.
Peace Corps, A Trainers Resource Guide (DRAFT)
INTRAH Draft Training Materials.
CCCD Training Manual TOT Module Draft, Peace Corps.

EXAMPLES OF COMPLETE AND INCOMPLETE PROJECT OBJECTIVES

1. More parents will use Oral Rehydration when their children have diarrhea.

2. Within six months parents will give oral rehydration therapy to 70% of the children in the community under five who have signs of diarrhea and/or dehydration.

3. CHW's will teach mothers to prepare nourishing food for other poorly nourished children.

4. Within three months, CHW's will identify and teach 50% of the mothers of malnourished children in the community how to prepare locally available foods to treat their children.

5. More children will be vaccinated to prevent measles.

6. Within one year mothers will bring 80% of the children in the community, who are less than 1 year old, to the health clinic for measles vaccination.

EXAMPLES OF OBJECTIVES FOR PROGRAMS, PROJECTS AND ACTIVITIES

The following set of examples illustrates how objectives for session and projects can contribure to national program goals and objectives.

Overall Program Goal:

To increase the survival rate of children under the age of five years through raising the quality of under-fives' health care and promoting the use of preventive health measures for this target group.

1. Program Objective:
   To reduce the mortality rate due to diarrhea in Regions A & B in children under five by 10% within the first year and an additional 57% over the next two years.

   Project Objective:
   Within six months parents will treat 10% of the children in the community under five who have signs of diarrhea and/or dehydration, promptly and appropriately with Oral Rehydration Therapy.

   Activity Objective:
   100% of the parents attending the health educators session, will mix ORS packets and homemade sugar salt solution using the correct ingredients, amounts and procedures as demonstrated by the trainer.

   CHWS who attend the training session will be able to use the WHO treatment chart and correctly distinguish between cases of mild and severe dehydration in community children with diarrhea.

2. Program Objective:
   Malnutrition will be reduced in Region X by 20% within the first two years and continuing until the national average is reached.

   Project Objective:
   Within three months CHW's will identify and teach 50% of the mothers of malnourished children in the community how to prepare locally available foods to treat these children.

Activity Objective:

CHW's who attend the training session will be able to accurately assess the nutritional status of the children in the community using three anthropometric techniques.

60% of the mothers who attend health education sessions on food preparation for malnourished children will be able to prepare, by the fifth session, three nutritious dishes using locally grown food stuffs.

Program Objective

Within Region D, after 1 year of instituting an EPI program the morbidity rate due to measles will be reduced by 66%.

Project Objective:

Within one year, 80% of the mothers with infants between 9 months and one year will have them vaccinated for measles at the health post.

Activity Objectives:

90% of all mothers in the community having a child less than one year old, who participated in the health education sessions during prenatal and postnatal checkups, will correctly explain to at least one other mother why it is important to immunize children at nine months.

Within six weeks at least 80% of the commuity will receive information, via flyers, displays, and community health talks by health workers, information about the need for and times when children under 1 year should be taken to the clinic to receive their measles immunization.

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REVIEWING OBSTACLES AND LIMITATIONS

Having set objectives the question must be asked: Are there any reasons why these objectives could not be attained? Are there limitations obstacles in the way?

Types of obstacles and limitations

The limitations of an activity may be simply the absence of resources and are discovered during a review of resources.

For example:

People	- are not interested, or they feel they have other more important needs, or there are no trained or skilled people.
Equipment	- is not available or cannot be bought or is too expensive.
Information	- is hard to find: there are no books, and advisers are not available.
Money	- is in short supply.
Time	- no one has time to start the plan or to supervise it.

There may be special environmental obstacles, and when making a plan, the environment should be reviewed to see if it presents any special difficulties such as:

- Geographical problems, which would be important in building roads, marketing goods, or transporting patients to hospital. Mountains, seas and lakes may present big obstacles to delivering an adequate health service in some areas.
- Climate, which may influence types of buildings, transport, gardening, nature of health problems, etc.
- Technical difficulties related to the technical level of the society, Thus, an electric centrifuge is useless in a health centre without electricity.
- Social factors, which are the most serious obstacles. There may be customs or taboos that operate against the plan. People may have prejudices against new ideas. Or there may be laws or regulations (good or bad) that prevent certain activities.

Finally, having reviewed and classified the obstacles and limitations, the health worker looks again at the objectives and changes or modifies them if necessary. Then they become the objectives and targets to be achieved.

The output of this Step would be an analysis of obstacles and limitations and a final list of objectives and targets.

Analysing the obstacles

A simple method is to list the objectives, then to write down the obstacles and limitations for each one, and group them under three headings as follows:

1. Obstacles that can be removed, i.e., a solution has been found. For example: "to provide and improve maternity care". The obstacle is a shortage of qualified midwives. The suggested solution is to train traditional birth attendants, supervision to be provided by midwives.

2. Obstacles that can be modified or reduced. For example: a group of villages want their children to be educated. They set as targets to build a school and recruit a teacher. They find their resources are insufficient. So they erect a simple construction providing at least protection from sun and rain. This permits them to offer a house to the teacher as an incentive to come to a rural area. A teacher can teach without a school building; but a building, however well equipped, is useless without a teacher.

3. Obstacles that cannot be removed. Most people have a more or less fixed income, at least for long periods of time. People can budget in a better way, use money differently, look for bargains, but the income is unchanged and living must be adjusted to it. In health planning, an objective must sometimes be replaced by one that needs less resources. For example, if it is planned to employ a midwife-supervisor and none is available, the goal may be changed so as to have an experienced trained TBA who will support and help others.

Example 1: Some obstacles to antenatal care

Objectives and targets have been set and one must make sure that there are no obstacles to their achievement.

Consider the target set on page 289, "to provide 60% of expectant mothers in the district with antenatal care during the period January 1981 to January 1982". Obstacles to achieving this target are:

- *Lack of transport*
- *Impassable mountain roads*
- *Women are not interested*
- *Shortage of trained personnel.*

Can these obstacles be overcome so that there is a good chance of meeting the target?

Example 2:. Analysis of some obstacles

Objective	Obstacle	Analysis		Cannot be Changed
		Removed	Modified	
1 To provide trained personnel for all women in childbirth by 1985	Shortgage of midwives. Insufficient maternity beds	Train and utilize traditional birth attendants (TBA); midwives support TBA. Care for women at risk		
2 Build school	Insufficient material and money		Build simple shelter, using local material	
Recruit teacher	No accommodation		Build house for teacher	

SUMMARY STEP 4

ASK THE QUESTION "WHAT IS PREVENTING THE ACHIEVEMENT OF THE OBJECTIVE?"

REVIEW OBSTACLES/LIMITATIONS OF RESOURCES - PEOPLE, EQUIPMENT, INFORMATION, MONEY AND TIME.

REVIEW OBSTACLES/LIMIATIONS IN THE ENVIRONMENT - GEOGRAPHICAL, CLIMATIC, TECHNICAL AND SOCIAL.

ANALYSE OBSTACLES/LIMITATIONS TO DISCOVER TO WHAT EXTENT THEY CAN BE OVERCOME OR MODIFIED.

(From: On Being In Charge. pp. 293-295)

Session 21

PLANNING AND EVALUATING A HEALTH EDUCATION PROJECT

TOTAL TIME Session 3 hours

OVERVIEW In the past two sessions participants have examined and practiced problem identification and objective writing. In this and the next session participants will discuss and practice aspects of the remaining steps of the health education process. Skill in planning and evaluating health education is important for the success of any project. Ongoing monitoring and evaluation provides a means to improve activities during and after the project. It also provides a means to increase community involvement in a project. In this session participants work in small groups using a planning worksheet to plan a health education project and assess resources and constraints to the project. They also discuss what, when, and how to evaluate health education projects and include evaluation in their project plans.

OBJECTIVES

- To assess the resources and the constraints related to a health education project.
  (Step 1)
- To explain when and how to monitor and evaluate a health education project.
  (Steps 2-3)
- To plan the implementation of a health education project, using a planning worksheet.
  (Steps 4-6)

RESOURCES

Bridging the Gap Part IV
Demystifying Evaluation
Helping Health Workers Learn. Chapter 9, pp. 12-22
On Being In Charge (WHO)
Health Education in Developing Countries. pp. 19-33
"The Planning Dialogue in the Community" *Contact 43*

Handouts:
- 21A Planning a Community Health Project
- 21B Example of Project Evaluation
- 21C Health Education Planning Worksheet

Trainer Attachments:
- 21A The Bamboo Bridge Activity
- 21B Evaluation Case Example
- 21C Counting vs. Description in Evaluation
- 21D Questions for Evaluating Community Participation
- 21E Guide to the Health Education Planning Worksheet

MATERIALS Two blank posters, long strips of paper, string, flannel board or chalkboard, colored paper, glue, newsprint and markers (for bamboo bridge activity)

PROCEDURE

Trainer Note

Prior to the session, distribute Handout 21A (listed above) and ask participants to read it before the session. Also, ask participants to read about evaluation in Helping Health Workers Learn (particularly pages 9-12 through 9-22).

Assign several participants the task of facilitating the Bamboo Bridge activity in Step 1. Give them Trainer Attachment 21A as a guide to their preparation of this step. Read Trainer Attachments 21B, 21C and 21D (listed above) as background for this session. These articles place health education evaluation in the broader context of primary health care planning, monitoring and evaluation. Also review Session 9 (Monitoring) so that you can link this session to that one.

Prepare a large version of the Health Education Planning Worksheet (Handout 21C) to use during discussion in Step 5. If you discuss the time and task chart, (shown in the Trainer Note at the end of Step 5) make a large version of that as well.

Make yourself available as a resource but not as a guide as they develop their projects. Encourage them to seek suggestions from the community as well as from peers.

Step 1
(20 min)

Bamboo Bridge Activity

Introduce the session objectives and emphasize the importance of planning with the community in an organized way to improve health. Explain that the activity they are about to do is one way of doing this. Ask the preassigned participants to facilitate the bamboo bridge activity, based on Trainer Attachment 21A (The Bamboo Bridge Activity), using the problems and objectives developed in previous sessions. The main focus of the activity should be identifying resources and obstacles and making a plan of action.

Step 2
(20 min)

Processing the Activity

At the end of the activity ask participants:

- What did you learn about project planning from this activity?
- Could you use this activity in the community?

Step 3
(25 min)

Discussion of Why, What and When to Evaluate

Ask participants how they make everyday choices such as the following:

- Picking out the best fruit in the market.
- Deciding on the quality of a film or play.
- Choosing the team for a sports competition.

Use the answers from this discussion to make the point that evaluation is something that people do everyday. It involves making judgements according to criteria, or minimum standards in order to plan actions and decide how to improve future actions. Ask them what standards they would use to evaluate the project proposed in the bamboo bridge activity and other health education projects. Use this discussion to lead into the next step - how to Evaluate.

Trainer Note

In the discussion of standards, they should answer that objectives provide the standards for evaluation. If participants fail to make the connection between objectives and evaluation, briefly review some of points of discussion from Sessions 19 (Identifying and Analyzing Priority Health Problems) and 20 (Writing Objectives for Health Education) and look specifically at the objectives participants developed. Discuss how well these objectives will serve as measures of project progress and accomplishments.

Make sure participants understand that evaluation can serve a number of purposes including:

- Measuring how well the objectives were accomplished.
- Assessing the performance of the health educator.
- Assessing what participants learned.
- Assessing the cost effectiveness of the project or activity.
- Assessing community participation.

Emphasize the importance of basing evaluation on the objectives and and how you and others will use the evaluation results.

Tell participants to recall the definition of monitoring from Session 9 (Monitoring). Explain that monitoring provides ongoing information about project progress, checking whether the activities carried out are creating the conditions to accomplish the objectives. Evaluation of outcome refers to whether or not the objectives for a session or project were accomplished. When speaking very broadly about evaluation, monitoring can be described as part of the overall evaluation process.

Refer to Helping Health Workers Learn, Chapter 9 pages 9-13 and 22 and note the limitations of evaluation mentioned there.

Step 4
(15 min)

Discussion of How to Evaluate Projects

Distribute Handout 21B (Example of Project Evaluation). Review the sources of information, tools to gather information, who participates and when, for at least one of the key questions listed. Ask for an example of another key question, and have the group discuss and give the same kind of information as for the first example. Ask someone to record the ideas as they are suggested. Encourage them to use ideas from their reading of Helping Health Workers Learn.

Trainer Note

If participants have little or no experience with project evaluation, describe the case in Trainer Attachment 221 (Evaluation Case Example) to start off this step. The case will provide a concrete experience on which to base the activity if participants lack their own. Ask participants to share experiences in project evaluation.

Also briefly explain the difference between quantitative and qualitative evaluation, and emphasize the importance of using both to balance out the weaknesses and strengths of each of the two types. Trainer Attachment 21C (Counting vs. Description in Evaluation) provides background information on this distinction. Trainer Attachment 21D (Questions for Evaluating Community Participation) lists questions and information required to evaluate community participation in a project.

Be sure participants understand the need to evaluate every part of a total project (not just the activities) to be able to pinpoint strengths and weaknesses and make appropriate modifications. The discussion in this session should focus on the evaluation of a whole project. In Session 25, participants concentrate on how to design and evaluate one specific health education session activity within the whole project

Step 5
(25 min)

Reviewing the Planning Worksheet

Distribute Handout 21C (Health Education Project Planning Worksheet). Discuss the worksheet and how it builds on what was done in the sessions on identifying problems and writing objectives, as well as what they learned about the community. Modify it, if needed, for use in the next step.

Trainer Note

If time allows, include a discussion of how to organize resources to implement a project. You can show a time task chart such as the one below and give an example showing how to use the chart for organizing materials people and tasks over time.

TIME TASK SHEET				
Tasks	Persons Responsible	Week 1	Week 2	Week 3

Trainer Attachment 21E (Guide to the Health Education Planning Worksheet) offers suggestions for clarifying the questions on the participant's worksheet.

Step 6
(30 min)

Planning Practice

Have the group divide into pairs explain that they will be working together for rest of this session and during Session 25-27, to plan a health education project and design and present a health education session.

Assign or ask each group to select one of the health education objectives developed in Session 20 to use as the basis for developing a health education project plan using Handout 21C (Health Education Project Planning Worksheet). Encourage them to select a project that they can use in their work in the host community. Tell them this is just the first draft. They will be giving each other suggestions and revising the plan during this session and throughout the remainder of the health education Sessions.

Trainer Note

You can use Handout 21A (Planning a Community Health Project) to assist you in guiding the discussion of this assignment and answering questions. For useful background reading see:

> Bridging the Gap, Part IV (Planning and Evaluating with the Community), and "The Planning Dialogue in the Community" Contact 43.

Ask individuals to pair up according to location of their assigned host communities so that they can continue to work together on this and other projects after the training. Also, arrange to have the final health education project plans duplicated so that each trainee can will have a set.

Step 7
(45 min)

Reports and Group Critique of Plans

Reconvene the large group and ask a each pair to briefly describe their health education project plans. After each presentation ask the rest of the group to consider how well the group has answered the questions discussed earlier. Ask them to offer suggestions of ways to improve the plan. Encourage them to point out what is good about the plan. Close the session by telling them that the next two session will build skills and knowledge for designing sessions to accomplish one project objective.

Trainer Note

If the group is large you may need to limit the number of reports.

PLANNING A COMMUNITY HEALTH PROJECT

Among the most important ideas for anyone involved in community work in health education is to be acquainted with as many aspects of community life and its people as possible. The purpose of gathering this information is to help the health or other community worker have a fuller understanding of some of the problems of the community and some limitations on the solutions to these problems.

Once the community members and the community worker come to a joint understanding and desire to work on a project, a sequence of steps should be followed in planning the project. Each step will be discussed separately in this chapter. The four steps are:

Step 1: *Define the problem:* It is important to involve the community and focus on their needs.

Step 2: *Choose a goal and objectives:* These should be measurable so that evaluation is made possible; they should relate to the problem; and they should be possible to achieve.

Step 3: *Assess the resources and barriers to the project:* This will involve finding the necessary materials; skills, people and funds; and investigating possible obstacles to the success of the project. The importance of doing this before carrying out the project is to make the plan for action realistic.

Step 4: *Carry out and evaluate the project:* An outline should be made of the specific activities aimed at reaching the goal. Because evaluation is an on-going process and takes place throughout the life of the project, both topics are covered together.

Step 3(a): Assessing Barriers to Changes in Health Behavior

This will involve investigating possible obstacles to the success of the project. The importance of doing this before carrying out the project is to make the plan for action more realistic.

As you have been getting acquainted in your community, you may have seen some evidence of poor health. You have observed that:

- many children are thin and small and have big bellies;
- the people live mostly on rice;
- few families have chickens, pigs, rabbits or goats for food;
- there is a year-round growing season, but few families grow vegetables;
- the only available milk is purchased;
- there is some fruit in the market, but it is expensive.

You have talked with the leaders and the people in the village about the problems of illness, fatigue, and deaths of young children. They show interest in doing something about it. You ask a group of leaders and a few parents to meet to discuss the problem and ways to solve it. In your meetings, you lead the people to discuss why the problems exist.

You and the group decide that there are not enough of the foods needed for good health and the villagers do not know about these foods. What are the obstacles, habits and attitudes that now keep people from growing green and yellow vegetables? Possibly the following items are found:

- lack of knowledge, information or experience
- no suitable seed
- seeds not easily available
- trouble with insects
- not enough water
- no real interest

- traditions and beliefs which hinder the acceptance of these food items
- lack of shared community resources such as irrigation pump
- no banking resources
- high debts

Obstacles or barriers to health education exist in all communities and relate to many things. There may be interest in things other than health (for example, roads, schools, agriculture). Usually, a community has seen little change as to its health status—that is, whether the general health level is high or is low. They have nothing to compare their predicament with, and hence do not see it as a predicament at all. Therefore, when health competes with such paramount demands as: earning a living; providing shelter, food and clothing; bringing up a family; it may be far down on the community's list of priorities. If the community is satisfied, on the whole, with its state of health, changes in behavior will be resisted mainly because to make these changes, the people will be inconvenienced. Long distances, to travel for medical care, long waiting periods, even painful experiences such as an injection, could also be barriers to change in the community. They may want other help, though, such as freedom from bedbugs or opportunity to space children. Such needs create opportunities.

Many cultural traditions, practices and beliefs in every society are related to health and may also be barriers to change methods of child feeding. The following are examples: the usual length of breast-feeding; when the first foods are introduced and their nature; whether milk or its products are customarily employed; the traditional use of other protein sources, especially legumes, eggs, fish; the commonness of such "prestige" practices as: bottle feeding, the use of carbonated beverages and over-milled flour; and the dietary practices of women during pregnancy, lactation and after giving birth.

These practices may be passed on from one generation to the next. Until acceptance of a change is complete, the return to traditional or popular practices will occur due to the strong need of the individual to be accepted by his/her social group.

Other barriers to health education could result from differences in languages. Perhaps there is an indigenous dialect in the area that you don't know. Find an interpreter and, if possible, train him or her so that he or she can work directly with the people. Remember, the translator is an "insider" and therefore more readily trusted and accepted by the community.

Closely related to the language barrier is the communication problem caused by illiteracy or low educational levels. The concepts of modern hygiene, for example, may have no meaning to a people who have never been exposed to facts related to the cell, microbes and the use of the microscope. In this case, the importance of knowing what the community knows becomes evident.

Other things to keep in mind when considering problems and setting goals are: the economic ability of the people (do they have the money, time resources, with which to take action?) and the community attitudes towards solving the problems. If their attitudes are negative, a definite barrier to change exists. How does the community feel about other government programs and workers?

Step 3(b): Assessing Apparent and Potential Resources

What are some of the resources you can use in your work with the community? Each situation offers different possibilities, but do not forget that you are a very important resource person in the area where you work. To function efficiently then, it is important that you know as much about your community as possible. What has been the history of its involvement in health issues in the past? You may have to dig deep to find a cohesive force, but all communities work together in some form.

The term "community" implies a sense of togetherness and, if you try, you will probably find that neighbors have helped each other in the past, even though it may not have been on a large scale. Perhaps one family helped another to build a house, or to take a sick child to the hospital. Perhaps the local church has a youth group which convenes and raises funds for various projects. Look; you will find potential resources.

What organizations or agencies exist? What are their activities and interests? Many communities have official (governmental), voluntary (private), professional, religious and civic groups. What are they doing? Are they interested in health? What approach do they use? Can you work together, one complementing the other?

Are there any extension workers other than yourself in the community? Find out and introduce yourself and what you are doing. Perhaps you can work together toward a common goal rather than fragment efforts and duplicate work.

Get to know the background, skills and strengths of those in communication with the community. These could be the teachers, the traditional healer, the merchants, the religious leaders, the heads of community organizations and clubs. Also available are the people involved with your specific project—your staff. There are those people working in various government and private agencies at local, national and sometimes international levels. Get to know what goes on in the local government and national ministries, who is available for contact, and what other agencies they can suggest as sources of further information and support. Acquaint yourself with the existences and services of the agencies and organizations in the country where you work. If possible, visit these agencies and take with you a leader from the community.

What kinds of supplies, materials and equipment will be necessary for the health plan? A vaccination campaign will need vaccine, possibly some means to keep it cold, needles and syringes, a place to sterilize equipment, paper on which to keep records, a means to publicize the campaign, a place to work, etc. To build latrines, you will need to know the geography of the area, where wood, sand, gravel and cement are available, etc. How can your project adapt to the available materials?

What will you need for educational supplies? Does a mass-information system exist? (radio, TV, newspapers) Where will you get paper, crayons, tape, tacks, projector, film? Can you make a bulletin board, blackboard, flip chart? Decide what you need and investigate your resource agencies, the schools and people. Who can be responsibile other than yourself? Look for talent within the community. Utilize relevant materials already in use. Make your own only when necessary so that time and efforts are not wasted.

How will you maintain your supplies? Will you need a place to work? In almost every project, some monetary source must be available. Where can you get money? Can funds be raised? How? Who will organize a fund raising project? Who will handle the money? These are all very important questions because trust can be lost if funds are mismanaged.

In Nicaragua, funds to build a community clinic were raised by the local Health Committee. The officers volunteered their time and visited the various merchants in the surrounding communities, asking for donated items. Such things as pots and pans, soap, fabrics, paint, food and toys were obtained and made as prizes to the winner of various community contests and games set up by the Committee. The contestants purchased a ticket for the contest at minimal fee and nearly everyone participated. A local leader who manufactured beds donated a bed for a raffle. The provisional clinic collected a voluntary fee for injections. All of these are possibilities for fund-raising projects, but remember to plan who will be responsible for safe-guarding the funds and who will make the decisions about their use raising them.

You are not working alone in this investigation of resources. Talk with the leaders, your supervisor, heads of community organizations. Get suggestions. Experiment. Publicize. But, most important, work together.

Step 4(a): Developing and Implementing a Project Plan

You have learned to know the people of the village and how they live. You have probably already helped them with some of their simple problems. You may have given some demonstrations and talked over village problems with the people. The Health Committee has identified a problem, defined a goal, and written objectives; barriers and resources have been assessed. Planning ahead to know what to do, when to do it, and how it should be done is essential in any kind of work.

"But why is a planned program needed?" A plan of work is a picture or "map" of what to do. If you and a friend started walking down a road, you would need to know which way to go in order to get to your destination. There could be several different roads leading to the same place, but perhaps one has advantages over the others. You need to decide between you which one to follow. A planned program is a guide to help the community get where it wants to go.

The importance of planning cannot be stressed too strongly. There must be joint planning on common problems by all of the interested groups. Attempts at cooperation too often fail because one person or one organization decides on a plan to be followed and then tries to get the others to follow a plan they did not help design.

If there is joint planning on a common problem, all are working toward the same goal. Independent action causes competition of the sort that is fatal to the success of a health plan because it can lead to competition for the attention and actions of the people, and create wasteful demands on limited resources.

The people must participate in each step. They need to decide just what to accomplish and what their targets are. When the people have agreed on their goals, they must decide how they are going to reach them. Sometimes it is harder for people to agree on how to do something than to decide to do it. Sometimes, each person thinks his or her own way is better.

The leaders may need help in deciding what will happen if they do it one way and what will happen if they do it another. Which will be better for the people? Does one cost more than the other? They must set priorities and decide on which is the better way for their community at this time. Deliberate involvement of as large a number of people as possible is good because it means that many more people know and understand the problem. All those who participate learn something. Men, women, children, young people, old people, merchants, housewives, speakers, farmers; all have some skill which can be utilized in carrying out a community health program.

The community leaders or the Health Committee must make the plan. This plan may have many parts. It will need a time schedule. What should be done first, and what comes next? How much time is needed for each job so that each will be done at the right time?

The planners must find out what is needed to do the job, who can do it, how much it will cost, and many other things. They must find the time, the people, the money, the equipment and anything else that is needed. Educational methods for each stage of the plan should be selected as part of the plan. See Chapters V and VI.

Once the steps to be taken have been defined, the Health Committee or planning group must decide who will be responsible for each step. For some jobs, workers will need special skills and equipment. Other jobs can be done by village people with no prior training. There will be many things to do: planning for equipment, arranging meetings, explaining procedures.

Everyone must feel that he/she has a chance to help. Doing the job is the actual step for which you have been planning, be it building a road, planting vegetable gardens, or vaccinating against measles. This step will give the community members a great measure of satisfaction and will draw the group more closely together.

To summarize, when planning a project with the community, the Health Committee or other community planning group will need to write down a Plan of Action. This is the "map." It will serve as a guide and will help in implementing and evaluating the project and planning another one.

Step 4(b): Evaluating the Project

Don't stop yet—evaluate! Planning never ends, so, each time a project or step of the program is completed, the Committee should look back over what has been done to be sure that things are going as they should. This is called evaluation and is an on-going, continuous process—just like planning. You must evaluate past efforts to plan for changes.

Develop a means for evaluation when defining the goal and writing up a Plan for Action. Keep in mind your community survey and any responses from questionnaires and statistics you might have collected as possible sources of information for evaluation.

Following each step or activity, ask questions such as:

- How well did we do?
- Did the plans work?
- Why did we succeed? or
- Why did we fail?
- What should we be doing now?
- What do we do next?
- If we made mistakes, can we keep from making them again?

Encourage the community members to begin to evaluate the project shortly after its initiation. Are people using the latrines that have been installed? Are they keeping up their vegetable gardens and eating the harvest? Are the children really going to school? Did the group for whom you intended your activities come?

After each phase of the project is over, you must follow-up to determine how successful it has been. At the end, ask yourself all of these questions again. Did you get the job done? What can be done to make your efforts more successful?

Possible kinds of measurements you might use to evaluate your project, if planned from the beginning, are:

1. *Quantity or amount*
    - a) How many persons were reached?
    - b) How many posters, pamphlets, home visits were made?
2. *Quality* — What do the people think?
    - a) the leaders?
    - b) the participants, villagers?
    - c) other health workers?
    - d) the pupils?
3. *Changes in knowledge* shown by:
    - a) questioning
    - b) requests for opinions
4. *Changes in attitude*
    - a) Community support for the program.
    - b) Requests for further cooperation by the Health Department.
    - c) Less opposition by groups in the village who had previously been against the project.
    - d) Public opinion poll
5. *Changes in behavior*, such as:
    - a) Increase in visits to the clinic or health worker
    - b) Improved habits and conditions noted at the school
    - c) Increase in the number of children immunized
    - d) Increase in the sale of milk, meat, vegetables or other good foods
    - e) Increase in the number of pregnant women seeking early prenatal care
    - f) Increase in the number of births that occur in the hospital or with the trained midwife
    - g) Increase in the number of infants under medical supervision

h) increase in the number of women who breast feed their babies

i) installation of sanitary facilities (latrines, garbage pits)

6. *Changes in health status* as shown in:

a) Child growth

b) Numbers of sick people (as shown in a survey)

c) Number of deaths as reported in public health statistics

d) Improvement in health as shown in individual cases

e) Reduced accident rate

f) Reduced exclusion from school due to illness, lack of clothing or poor hygiene[1]

In the case of evaluating an educational approach, you will find it difficult to measure the results. The mere giving of lessons or demonstrations and the ability of the people to repeat them are surely not the only measure. Behavior change is the goal, yet these changes are not easily evaluated immediately since they may occur slowly over a long period of time.

As always, throughout your work with the community, it will be necessary to record your observations. This is a form of written record which you've already done during your community investigation. You should discuss the importance of record keeping with the Health Committee.

Evaluating the progress of complex activities such as public health is never simple, but it can be made easier by clearly defining the project's objectives early and relating your evaluation plan directly to those objectives. With careful planning, evaluative data will help to assure that the project is better managed, and that those who support the work, and particularly members of the community, will feel confident in the progress being made.

1/ Turner, Claire E. *Community Health Educator's Compendium of Knowledge.* International Journal of Health Education, Switzerland, 1964. pages 105-108.

(From World Education Reports, "Evaluation". pp. 5-10.)

EXAMPLE OF PROJECT EVALUATION

Key Questions for Evaluation	Sources of Information	Tools to Gather Information	Who - Participates in Evaluation	When
What nutritional status at the beginning and end of the project	Children Mothers	Arm circumference measure scale for weighing household observation checklist Group discussion	Mothers measure. Staff weighs with mother Staff designs with mothers, use during home visit; Mothers organize with staff	monthly from beginning Continuous Continous
How much community participation in the project	community leaders Community members Group members Staff	community mtgs Notes of community mtgs; Open-ended interviews with community leaders; survey of participants	Leaders organize/staff asst Design by community/staff; staff implement Staff designs with leaders, applied by community volunteers.	Qtrly Mid-term Mid-term
How effective was participatory training	Trainers, Trainees Syllabi Group members Community members	Workshop Evaluation reports Syllabi checklist Surveys of participants; Creative expression; Games with participants	Staff prepares; discuss with community leaders; Teachers apply; Teachers apply Teachers facilitate; participants perform	Continuous Mid-term Mid-term Mid-term

Adapted from: Americn Council of Voluntary Agencies for Foreign Source. Evaluation Sourcebook, p. 36).

HEALTH EDUCATION PROJECT PLANNING WORKSHEET

1. What is the PROBLEM?

2. WHO are the learners?

3. What RESULTS does the Ministry of Health Expect?
Short Term
Long Term

4. What RESULTS do We Expect (Health Education Project Objectives)

5. WHEN will the project start?
End?

6. What RESOURCES are available?
What CONSTRAINTS?

7. How will we MONITOR and EVALUATE?
What Questions?
What Criteria?
What Methods for Collecting Information?

5. HOW will We DO This?	Specific Objectives	Activities	WHEN and WHERE
Community Organization			
Developing Skills			
Communicating Information			

THE BAMBOO BRIDGE ACTIVITY

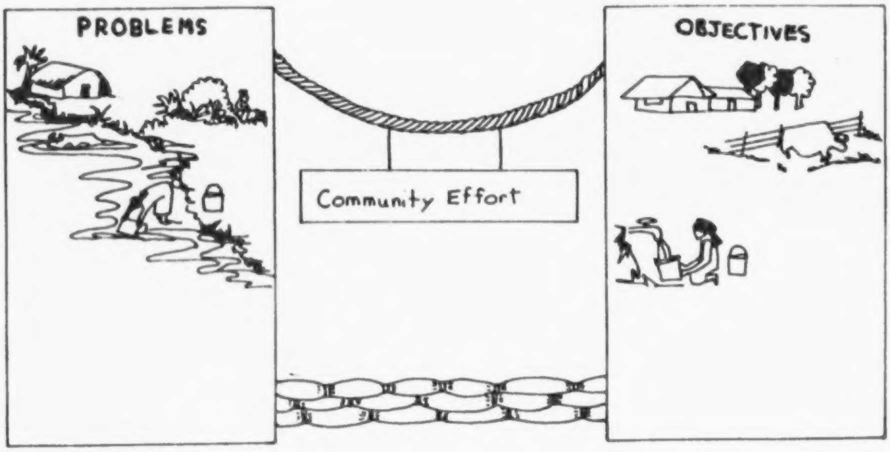
Materials to Prepare:

- a large flannel board or chalkboard
- two large blank posters
- 60 cm. of yarn or string
- several long strips of colored paper (60 cm. by 2 cm.)
- four long strips of paper (24cm. by 8 cm.), one labeled "Steps", one labeled "Barriers" and one labeled "Community Effort," and the other labeled "Resources"
- 12-15 paper labels (24 cm. by 8 cm.)
- several numbered paper cutouts to represent bare feet.
- glue cotton or sandpaper on the back of the labels so they will stick to the flannel board. Use tape to hold labels on a chalkboard.

1. Before the session prepare a poster illustrating the problem that your group identified during Session 19 (Identifying and Analyzing Priority Health Problems) and another picture illustrating your the objective that you developed in Session 20 (Writing Health Education Objectives). Label the the pictures as shown below.

2. Invite the community members who attended Session 19 to visit this session if possible . Arrange a translator if necessary.

3. Put up the posters and hang the string between the two posters. Attach the "Community Effort" label in the middle of the string.



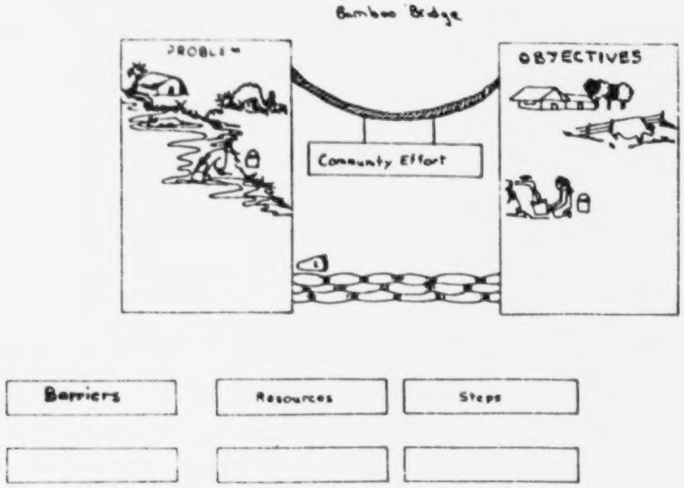
4. Greet the group and explain that they will be participating in a simulation of a community gathering to review problems, goals, resources and develop a plan of action for attaining the objectives. Briefly review how your group came up with the problems and the objectives. Ask the other participants to imagine that they are members of the community participating in a real town meeting.

5. Discuss potential barriers. Write the name of each barrier on a label and place it under the "Barriers" label, under the problem poster, as shown below.

6. Discuss available resources. Write the name of each resource, such as "village leadership," on a label and place it under the "Resources" label between the problems and objectives posters as shown below.

7. Ask the group, "what is the first small step using these resources, that you can take toward solving your problem and accomplishing your objectives?" Write their answer on a label and put it under "steps."

8. Place paper foot number one at the left side of the bridge, pointed toward the objective. Continue to discuss a step-by-step plan of action. Add each step to the "step" list and put another foot on the bridge.



9. Ask members of the group to summarize what they accomplished in the meeting and set a time to meet again to continue discussing the project.

(Adapted from: Bridging the Gap. pp. 93-94.)

EVALUATION CASE EXAMPLE

It's a story that's all too familiar to those of us working in development projects. But it doesn't have to be that way.

As educational planners and program administrators, we would do well to learn some lessons from the practice of regular checkups in the health field. If we don't, we will continue to find ourselves in the unsatisfying position of trying to figure out where our well-thought-out plans went wrong. And this is where evaluation procedures become a necessary tool for aiding project staff to carry out the periodic checkups that will tell them how the program and its various parts are functioning as they go along. Those procedures also lay the groundwork for determining at a later date what kinds of impact the program is having on the participants and communities it is designed to help.

Traditionally, evaluation has been thought of as a means to find out if a program "worked." The standard procedure in the best of circumstances has been as follows. First, the program goals and objectives are laid out. Then, some kind of baseline measure is taken of what the situation is before the start of the program. Finally, after two or three years of project activity, a similar post-test or survey is administered to see if there has been any change, and whether those goals and objectives have been reached.*

This post-project activity—which is generally carried out by some external agent—is often seen as threatening by those who are running the project.

**I have purposely avoided discussion of other types of evaluation procedures, such as control groups and quasi-experimental designs, for a number of reasons. First, such procedures are not generally used in evaluation of field projects. Second, most projects do not have access to the personnel or funds to carry them out. And, finally, their use raises ethical issues. I am not alone in questioning the propriety of gathering information from people for one's own research purposes unless the data gathered will be used in some direct and immediate way to benefit the lives of those involved.*

Anatomy of the Project:

More than 30 million people live in Ethiopia—a land bounded by the Red Sea, Kenya, Sudan, Somalia, and one of the newest and smallest of the independent countries of Africa—Djibouti.

In the background of IFLE lurk the grim statistics of poverty and infant mortality. The Institute of Development of Addis Ababa University conducted a survey in 1974 of the three original sites and pinpointed the most severe problems. The EWA put together a curriculum based on the life experiences of village people, emphasizing concepts in the problem areas.

Integrated family life education says that people can change through learning. In Ethiopia, the idea was to create a learning environment that emphasized active participation, dialogue, and problem-solving discussions. IFLE set out to hit hard at the specific problems involved in improving agricultural practices, health care, good nutritional practices, family planning, and basic literacy and numeracy skills. With some technical assistance from World Education, IFLE staff developed methods and materials that were used by 350 adults in three different sites during the first two years of the project. In its second cycle, the project was concerned with the greater development of integrated education. The staff, working hand-in-hand with government agencies, is trying to bring about positive change. ☐

Senior staff member Abebe with group leader Deribe.

EWA

'We expect to affect the lives of 100,000 adults.'

PROJECT: Integrated Family Life Education (IFLE)

SPONSOR: Ethiopian Women's Association (EWA)

LOCATION: Urban, semi-urban, and rural sites in Ethiopia.

TIME: Pilot program: 1973-1975; 300 learners in 3 sites.
Second cycle: 1975-1977; 1500 learners in 6 sites.
Expansion phase: 1977-1982; 10,000 adults in 12 sites. IFLE will also provide training to staff of other agencies and expects thereby to reach, indirectly, an additional 100,000 adult learners.

ACTING PROJECT MANAGER: W/O Loule Tesfaye

STAFF COMMITTEE: Abebe Hailu, Mesfin Igzaw, Mamitu Buzuneh

PURPOSE: To develop an integrated approach to adult education in health, nutrition, agriculture, family planning, and civics; to help participants cope with life problems, with special emphasis on self-help and income-generating activities; to use all available human and material resources by working with existing government agencies; to enable participants to use literacy, arithmetic, and problem-solving skills as tools for development.

REASON: A need to combat a high rate of infant mortality (181 per 1,000) and a high rate of illiteracy (92 percent).

FUNDING: USAID

TECHNICAL ASSISTANCE: World Education

It is of course important to know the impact of the project, but the reluctance of program staff to undergo "evaluation" in the traditional sense I have described is understandable. They see the outsiders coming in to tell them whether or not they have done a good job. This judgment usually has implications not only for the continuation of funding for the project but for their own job security. Further, in development projects, the outside experts may be persons who are sent at the behest of the funding agency, and who may have expertise in evaluation techniques but very little understanding of the project itself or of the culture in which the program is rooted. The criteria on which their judgments are made are often not clear; and if they are clear, the project staff may disagree with the evaluators about whether the criteria are appropriate for judging success.

But let us leave aside for the moment how criteria for success should be developed, what procedures for external evaluation should be developed, and who should participate in making those decisions—all of which contribute to the degree of threat. Suffice it to say that the word evaluation has traditionally been linked with the external process of judging the degree of success or failure at the end of a project. It is no surprise that evaluation has not, in most cases, been a high priority for those involved in the complicated daily tasks of running a project.

Evaluation as a diagnostic tool. More recently, however, emphasis is being placed on another aspect of evaluation, one that has always been there but perhaps too neglected in the past. Evaluation is increasingly seen as a valuable internal process for assisting staff to make more effective decisions while the project is actually going on. By designing ways to gather information on a regular basis from the outset of the project, staff members are able to receive feedback periodically on the way various aspects of the project are working. They can "check up" on the progress of those well-thought-out plans and make quick and timely changes in practice which, if not modified, could seriously impede potential positive outcomes of the project.

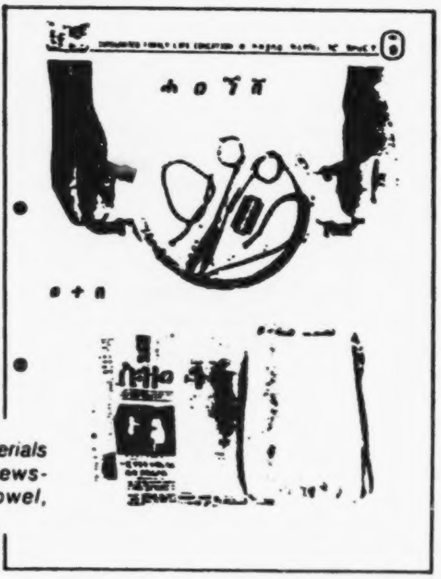
In nonformal education programs, these internal evaluation or "feedback" procedures can help to answer questions that deal with the basic health of the project: "Are the topics in the curriculum relevant? Are they of interest to the participants?" "Do the teachers—or group leaders, or facilitators, or *promotores*—feel comfortable with the teaching process? Do they need additional training?" "Are the materials effective? Do the visuals convey the meaning they were intended to convey?" "Are resource people available to help explain, or to provide skills training in a particular topic area?"

Questions, questions, questions. There are of course many other questions that feedback procedures can help project staff answer. The nature of those questions depends upon what the staff decides at the outset of the program are the most critical components.

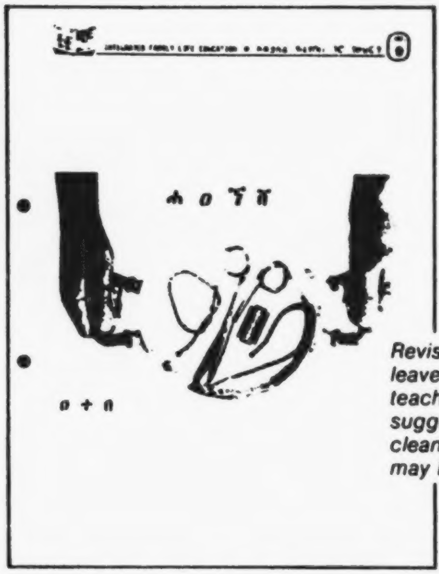
Not everything can be answered. To try to do so would be foolish. Evaluation costs money and takes time; trying to answer all the questions would mean that members of the staff would be spending all of their time collecting data instead of running the program.

The project staff must look carefully, therefore, at the pieces that make up the program as a whole. At the very beginning of the program, they must begin to decide what kinds of information will be most useful to them in understanding how various parts are functioning as the project proceeds. And then they must set up the simplest possible mechanisms for gathering that information—mechanisms that will not divert too much staff energy from running the project itself.

Do the visuals convey the meaning intended?



Original materials included newspaper, a towel, clean gauze.



Revised version leaves it to teacher to suggest whatever clean material may be available.

Project materials were revised in response to feedback from classes. A lesson that dealt with the things that should be ready for the birth of a baby, for example, was simplified so the message would be clearer. Background details had already been eliminated, consistent with Fugelsang's studies showing that such detail can be confusing for illiterate learners.

The original math materials, on the other hand, were too easy for the learners. Many participants were already able to do the arithmetic necessary for buying and selling in the local market but felt that they were often cheated because they could not do more complicated computations. Materials were changed to give participants practice in skills they really needed.

Also at this point, very early in the program, everyone concerned with the project—staff, funders, coordinating agencies, and others concerned directly with the program—needs to look two or three years down the road and make some preparations for judging the impact or outcome of the project. Like it or not, it is important to know how well the project worked. What kind of impact did it have on the lives of the participants it was designed to serve?

All of those connected with the project, directly or indirectly, will have various things that they want to know about that impact. Therefore it is important at the outset for all the concerned parties—even the participants—to decide what the criteria for "success" should be, what kinds of indicators will tell the degree to which those criteria are being reached, what kind of information is needed to arrive at those indicators, and finally, how that information will be gathered and by whom.

The reason for making some decisions about the final evaluation at the outset is to ensure that comparable data is collected at the beginning of the project and at the end. Only if the information that is gathered to describe the original existing situation can be compared with information about similar situations existing at the end of the project—when the impact evaluation is carried out—will there be a frame of reference against which to look at the degree of change.

All too often, thinking about the final evaluation is left until the project is about to end. We find ourselves then in the untenable position of being able to describe how things are now that it is over, but having to guess how they were at the beginning.

Another reason for having everyone concerned with the project play some part in designing the final evaluation is to avoid having staff members and program participants feel threatened by outsiders judging their work. If all—participants and teachers or group leaders, supervisors and administrators, those who provide the technical assistance and those who provide the funding—understand and have agreed on the criteria for judging success and the process by which that will be done, it is more likely that the final evaluation will be handled in a spirit of cooperation and the results taken seriously by all those who have a stake in the project.

UNITED NATIONS

Generating data. In designing both the feedback (formative evaluation) system and the final (summative) evaluation procedures, staff members will undoubtedly discover that there is great overlap in the kinds of information that they need to gather in order to monitor the functioning of various components and the kind of data that will be needed in order to judge success. In effect, then, they will be able to kill two birds with one stone. They will be generating data along the way that will be of immediate use in making programmatic decisions. They will also be gathering information that will be needed during the final evaluation, making that activity more manageable.

One project which illustrates the usefulness of a simple but carefully thought-out evaluation process is the Integrated Family Life Education Project (IFLE), which is being carried out by the Ethiopian Women's Association. [See page 4 for project background.] This project demonstrates that a feedback system which is an integral part of program activities can provide staff with regular data about the process of implementing the project, and about the successes and problems of various parts of the project. In this particular project in Ethiopia, the feedback system also became an essential and integral part of more extensive evaluation data, aimed at assessing the project's impact on the lives of participants.

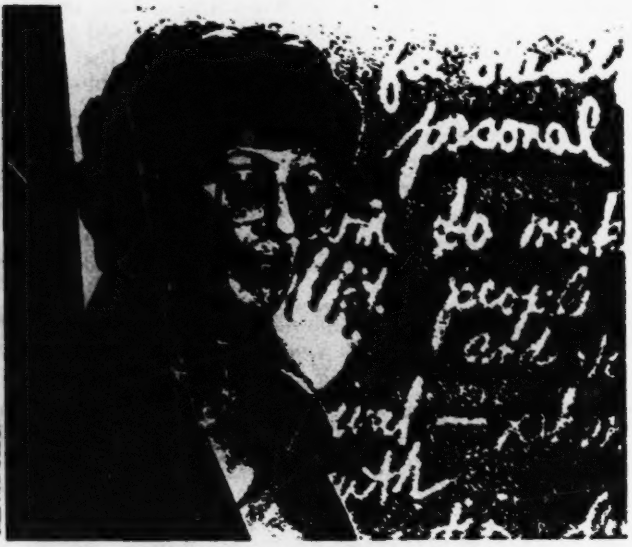
They needed to devise some way to learn quickly what was actually going on. . .

Let's do it right. After the first pilot stage was over, Abeba Wolderufael, who was director of the project, determined with her advisory committee that they needed to devise some way to learn quickly what was actually going on in the classrooms and the villages so that they could respond quickly to problems as they arose and to the changing needs of both the adult learners and the staff. The efficiency of the whole program was enriched by the continued support and guidance given by the IFLE Advisory Board, 15 representatives of both public and private service agencies in Ethiopia—ranging from the Ministry of Education to the Ethio-Swedish Pediatric Clinic.

In February 1976, the project staff, with the technical assistance of World Education consultant Noreen Clark, designed an evaluation system that would both generate feedback at regular intervals and provide the baseline data against which to measure program impact after one cycle of project classes.

In devising the feedback system, Dr. Clark, W/O Abeba, and other project staff borrowed techniques from what is termed "discrepancy analysis." The basic assumption behind this approach is that an educational process can best be understood "by coming to see the process through the eyes of those who are interacting to make it happen." First it is necessary to establish the intent of the program—including the individual components that you wish to examine. Then data is collected to determine the current practice (what is actually going on) in order to compare the intent with actual practice and to discover the

None of the procedures was complex. None relied on sophisticated technologies. . .



BILL NAPOLEON

Noreen Clark worked with IFLE staff to design a comprehensive feedback system.

nature and extent of the discrepancies. And finally the program director will make decisions about changes that would reduce the gap between intent and practice.

In selecting the program areas to examine, the staff used the following criteria:

1. *The information generated is consistent with the project's aim to be of direct benefit to participants in IFLE classes and the communities in which they reside.*
2. *Approaches are acceptable to class members, communities, group leaders, and cooperating agencies and individuals.*
3. *Procedures can be easily initiated and managed by staff, group leaders, and other Project personnel.*
4. *Continuous procedures will yield data over the life of the Project that will be the basis for or aid in strengthening other Project activities such as development of materials, design of leaders' manuals, leader training, etc.*

Having decided the general areas in which they needed to gather information, the IFLE staff designed the procedures and instruments for doing so. None of the procedures devised was complex. None relied on sophisticated technology or the use of a computer. No special training was demanded of staff beyond what could be built into the same workshop in which they developed the instruments.

The first of the procedures planned was a preliminary interview with each participant in the program. This would cover each person's knowledge, attitudes, and practices related to health, family planning, cooperative work, farming, nutrition, and literacy and numeracy skills. The staff would also, at the outset, develop community profiles based on interviews with ten key individuals (e.g., health officials, government officials, religious leaders), and ten community residents, as well as on statistical information and records. This information would serve as baselines against which to measure change. In addition, the collection of data from health clinics and other community agencies was planned to determine the extent to which participants were actually using these services.

It was agreed that the group leaders would make regular and frequent home visits to each participant. This would allow them to help class members when necessary and at the same time to observe any changes or improvements in practice, providing a useful cross-check to determine whether participants were in fact changing their behavior as the program progressed.

Field supervisors would regularly observe classes; regular central staff would make regular visits to the sites; group leaders would fill out weekly lesson plan forms and would keep careful attendance registers.

In designing this evaluation system, the project staff clearly took into account the need to generate data for determining impact on participants' lives.

How is the feedback system working? Is it making any difference in the way in which the original plans are implemented? According to a recent evaluation carried out by consultant John Pettit, the answer is a definite Yes.

INTEGRATED FAMILY LIFE EDUCATI
FIELD SUPERVISOR'S OBSERVA

Date: ____________________
Site visited: ____________________
Class: ____________________
Group leader: ____________________

1. Aim of visit:
   a) general aim ____________
   b) specific " ____________
   c) approach of the group leader ____________
   d) subject discussed and his knowled
      of the subject ____________
   e) method of teaching ____________

2. Group leader's interest in the participants:
   a) watched the group ____________
   b) asks questions ____________
   c) initiates discussion ____________
   d) does not do all the talking ____________
   Group leader's:
   a) language ____________
   b) pace of teaching ____________
   c) organization of subject matter ____________

3. Group members':
   a) seating arrangement ____________
   b) participation ____________
   c) interest ____________

4. Others: ____________
____

EWA

Field supervisors make regular visits to the IFLE centers for a first-hand look at the activities. Here, women spin cotton in Entoto.

Feedback system works. The field supervisors' reports, regular site visits by staff, and the group leaders' weekly lesson plans have identified problems with the materials, which consequently were revised. The need to change emphasis on specific content areas in different sites, according to the interests and needs of the participants, also surfaced.

At Lumamie, for instance, where many of the participants are market people and traders, 30 extra pages of math were added. Participants at several different sites pointed out to staff that the materials did not deal at all with rabies, alcohol, or drugs. The revised materials include lessons on all three topics. Attendance records revealed that in some sites the rainy season sharply decreases attendance; therefore, instead of holding classes during July and August, the group leaders help participants with their vegetable plots.

And what about the data being generated to determine impact on learners' lives? According to the external evaluator, the pre- and post-class questionnaires are the most valuable instruments in the feedback system; they are in fact producing qualitative measures of success about change in attitudes and behavior of participants exposed to the concepts of integrated family life education. The records of home visits serve to document that these changes are in fact occurring.

At the time the feedback system was designed it was agreed that an external evaluation would be carried out after another cycle of classes had been completed—in one year's time. Both the project staff and the funding agency felt it was important to have another perspective on the project's activities and their results. Staff members were eager to have help in analyzing the significance of the data they were collecting and to know if, in fact, the project was doing as well as they thought. The specialists who were providing technical assistance wanted to examine successful factors so that they could be adapted elsewhere—and failures so that they might learn from them as well. The funding agency was interested in knowing if all the elements of the project were in place and functioning, and in knowing what impact the project had had on the lives of the participants; with this information, they would be better able to make a decision about whether to continue funding the project.

Changes documented. Bearing in mind the concerns of all groups, John Pettit carried out an external evaluation in January 1977. Because of the extensive benchmark data collected on participants at the beginning of the program cycle, Pettit was able to document changes in literacy and numeracy skills, attitudes about education and development problems, and practices in family planning, agriculture, and health. He administered a revised post-class participant interview to a random sample of one-third of the Level I graduates and compared the results with the pre-class interviews. In addition, Pettit carried out structured interviews with each of 18 group leaders. These interviews focused on the program's impact on the community, perception of the leader's role, learning climate, materials, and

John Pettit spent three weeks evaluating the IFLE project in Ethiopia.

project management. This data was then compared to the views of community leaders, local government officials, and project staff with whom he also conducted interviews. During the evaluation process, he also was able to observe IFLE classes at all of the sites.

And what results surfaced from this evaluation? In his evaluation report, Pettit sums up his conclusions:

"Since IFLE's conception, the program has matured into a serious development effort with many supporters in and out of government. The reason for the program's widespread acceptance is the apparent success of its integrated approach and the many graduates whose lives have been changed since they began to participate in IFLE classes and development activities. This unique program has reached out to people who saw themselves as passed over; many of the participants believed that education was for the young. Now the views of the men and women who come to classes are easily summed up in one word, *hope* . . . it is apparent to this evaluator that the approach used by the IFLE organization is providing people with a learning environment where they can develop skills and attitudes that enable them to improve the quality of their own lives, and contribute to the national development effort of the Ethiopian Government."

Because of the impact of the program as evidenced by the information generated, both through the project's feedback system and the external evaluation, the funding agency has decided to fund a third phase of the program. This will include expansion of the project to other sites as well as training staff of other agencies in the IFLE approach to development. And it is the belief of all those involved in the IFLE program—staff, consultants, and funders—that this expansion phase of the project may very well not have been possible without the existence of the feedback and evaluation systems: systems which both identified needs for programmatic changes as the project proceeded and documented the positive impact of the IFLE project on the individuals and communities it is designed to assist.

"Now we are on firm ground," says Mesfin Igzaw, a member of the senior staff committee that is currently managing the project. "Now we have the capacity to train others. In the next five years, we expect to reach about 10,000 adults ourselves and to produce 15,000 Level I materials. But because we will also be a training center for other organizations, and working with the *kebeles* [local government administrative units] and peasant associations, we expect, to affect the lives of 100,000 adults in different parts of Ethiopia."

Diagnosis or autopsy? We need both, but one would hope that through use of effective feedback procedures, we would avoid the need for autopsy and be able to look instead at the results of a healthy project.☐

COUNTING vs DESCRIPTION IN EVALUATION

Quantitative evaluation is generally done using survey research with a large sample of people in the target groups for a particular activity or project. Statistical techniques are used to adjust for errors in data collection. Alone, quantitative data offer limited insights on the perceptions and social context of the people toward whom the health education project is directed. Qualitative evaluation aims to describe in greater depth the perceptions and social context of a few individuals in the target group. While this approach runs the danger of providing information that does not reflect the views of the entire population. If cases are not carefully selected, it provides rich cultural detail that can make easier to interpret survey data.

Qualitative	Quantitative
"Concerned with understanding human behavior from the actor°s frame reference"	"Seeks the facts or causes of social phenomena with little regard for the subjective states of individuals"
Naturalistic and controlled observation	Obtrusive and controlled measurement
Subjective	Objective
Close to the data, the "insider" perspectives	Removed from the data; the "outsider" perspective
Process -oriented	Outcome-oriented
Valid: "rich" data	Reliable "hard" data
Assumes a dynamic reality	Assumes a stable reality

(From: American Council of Voluntary Agencies in Foreign Service. Evaluation Sourcebook p.8)

TABLE 7 QUESTIONS FOR EVALUATING COMMUNITY PARTICIPATION*

Questions for evaluation: suggested framework for development of evaluation guidelines
Community Participation and Development

Main Questions	*Sub-Questions*	*Information Required*	*Methods of Obtaining Information*
1. What is the nature and extent of community participation?	1) Is the community involved in planning, management and control of the health program at community level?	1) Nature and effectiveness of local decision-making institutions (e.g. health committee). No. of meetings held where health issues discussed. Participants at meetings.	1) and 2) Observations at meetings, interviews and questionnaires with local personnel and health community development extension personnel.
	2) Are local resources used? What kinds of resources? (labor, buildings, money, mass activities)	2) Means of raising revenue, how much raised. Degree of financial control of health activities, Other resources contributed.	
	3) Is there a community health worker (or workers?)	3) Selection procedures for CHWs. How paid/supported. CHWs' role in health development committee. Functions and activities of CHWs.	3) Interviews with CHWs and community members and leaders.
	4) What percentage of the community participate in health activities? (e.g. immunization, use of child clinics, antenatal care, latrines, clean water)	4) No. of people with or using clean water, attending organized health activities etc. (see coverage)	4) Surveys, household questionnaires, health service statistics.
	5) Have community projects been implemented? (e.g. setting up a day care/child feeding center, water protection)	5) Existence of community programs or evidence of ongoing or completed projects.	5) Observations.
2. Is there a mechanism for the integration of community activities at local level with outside agencies?	1) Is there a mechanism for dialog between health system personnel and community leadership?	1) No. of meetings between health system and community representatives. Topics discussed and characteristics of participants.	1) Observation and interviews at community level.
	2) What other agencies are involved at community level and what socioeconomic development activities are being implemented?	2) Other sector activities at community level. No. of visits to community by other agency personnel.	2) and 3) Interviews with personnel from other agencies, health and community leaders.
	3) Does the mechanism for dialog with the health system (if it exists) include involvement of other agencies?	3) Level of other agency participation in community meetings.	
	4) Is there a mechanism for intersectoral co-ordination at higher levels? (e.g. district or region). How much control of resources and autonomy does it have?	4) Institutional administrative mechanisms at district level. Nature of decision-making bodies and their membership. Intersectoral representation. Access to resources.	4) Interviews and possible observations at district level.

Main Questions	Sub-Questions	Information Required	Methods of Obtaining Information
3. Are health activities coordinated with other sector development programs?	1) Is there evidence of coordination between health activities and other sector programs?	1) Health activities in schools. Role of health workers in agricultural extension - promotion of gardens, poultry, etc.	1) Visits to schools, interviews with school teachers, observations and interviews with health workers and CHWs.
4. Is there a mechanism for community representatives to be involved in decision-making at higher levels and is this effective (are their interests adequately met)?	1) Are community representatives involved at district and regional-level health planning and program management bodies? How much power do they have?	1) Participation of community members in district and regional-level health planning and management bodies. Who from the community participates, and do they have an effective vote?	1) Interviews and observation, study of minutes of meetings, etc.
5. What forms of social organization exist in the community and how effective or powerful are they?	1) Are there women's groups, farmers' cooperatives or clubs, church or religious organizations, young people's clubs, political organizations, trade unions, etc.? How active are they? How are they represented in the community leadership?	1) Identification of social groups, numbers involved in each, and representation of groups in community leadership. Information on activities of groups and influence on members, etc.	1) Questionnaires, interviews and anthropological in-depth studies.
6. Are traditional practitioners integrated into the PHC program?	1) Where do traditional health practitioners exist in the community? How frequently are they used for what purpose? Are they involved in health committees? Is there any contact between them and health system personnel (have they had training)?	1) No. and type of traditional practitioners and their workloads and patients. Utilization patterns of traditional practitioners. Membership of health committee. No. of contacts with health system personnel. Nos. trained, etc.	1) Interviews with traditional practitioners, and patients. Household questionnaires (see health needs agreement). Health system records and interviews with health system personnel.
7. What is the potential for increased community participation and more democratization at local level.	1) Are deprived groups adequately represented in decision-making institutions? How can their interests be more adequately represented in centers of power? Are there activities for consciousness-raising, improving knowledge and skill of deprived groups?	1) Identification of deprived social groups (e.g. access to land, jobs, low income, etc.) Participation in community meetings, etc. How effectively organized and possibility for cooperative formation based on economic activity.	1) Questionnaires, interviews, anthropological studies.
8. Is the community being adequately informed about health matters?	1) What methods of communication are being used and how effectively are they reaching people?	1) Evidence of mass media educational programs. Health education activities through health system. Health information provided through other sector extension programs. Percentage literacy and use of mass media coverage by extension programs.	1) Survey of health education programs.
	2) Is the information relevant, appropriate, and accurate?	2) Content of educational programs and comparison with agreed standards and priorities.	2) Assessment of the quality (methods, e.g., visual aids used and content. Subject matter correct and related to stated priorities). Household questionnaires.

*Susan Cole-King, *Approaches to the Evaluation of Maternal and Child Health Care in the Context of Primary Health Care.*

(From: APHA "Community Participation". pp. 68-69)

GUIDE TO THE HEALTH EDUCATION PROJECT PLANNING WORKSHEET

The following points will help you explain the questions on the planning worksheet:

- What is the PROBLEM? (what aspect of the current situation is harmful to health and well-being).

- WHO are the learners? (for whom is the health education project intended? What do they know and feel and do about the problem? What do they already know, feel and do?)

- How will individual learners , groups and communities be involved in formulating and carrying out the project?

- WHAT RESULTS does the Ministry of Health expect? What results do you expect? (What changes in health do you expect? what do the participants need to know, do or feel to accomplish this?)

- WHEN, WHERE and for HOW LONG will you conduct this project? How will you do this?

- What RESOURCES are available to carry out the project? (what supplies, people with special skills and knowledge, equipment etc).

- What CONSTRAINTS could limit the success of the project?

  How will you EVALUATE , during and after, both the project and the techniques? (did you accomplish your objectives? How will you provide follow-up help and information?

- HOW will you do this?

- What main kinds of health education activities will you use? (what combinations of teaching, skills and communicating information, community organization discussion groups, home visits, displays,school health education, community health campaigns, forming a health committee, town meetings)

- What techniques and materials will you use? (what nonformal education techniques and visual aids are most effective for the types of learning specif'ed in the objectives and the time available for the activities?)

Session 22

SELECTING AND USING NON-FORMAL EDUCATION TECHNIQUES

TOTAL TIME 3 hours

OVERVIEW

Selecting and using appropriate nonformal education techniques is an effective way to involve the community in all the steps of the health education process, and is essential for successful health education sessions. Nonformal education techniques can be used in community problem identification, health education, and evaluation. In this session participants discuss a variety of techniques and materials used in this and earlier sessions of this training. They practice using techniques such as drama, discussion and demonstration. They also examine educational and cultural considerations in the selection of techniques and materials for health education in the local community.

OBJECTIVES

- To practice use of drama, storytelling, song, discussion and demonstration for health education.
  (Steps 1-3)
- To list educational and cultural criteria for selecting nonformal education techniques .
  (Steps 4, 5)

RESOURCES

- Bridging the Gap Parts II and III.
- Helping Health Workers Learn
- Appropriate Technology for Health: Health Education Methods and Materials
- Audiovisual/Communications Teaching Aids Resource Packet P-8.
- From the Field: Participatory Activities
- Working With Villagers
- Teaching and Learning With Visual Aids. Unit 5
- Community Culture and Care. pp.45-79.

Handouts:
- 22A Training Techniques
- 22B Using Pictures to Stimulate Discussion
- 22C Guidelines for Discussions
- 22D Guidelines for Demonstrations

Trainer Attachments:

- 22A Can Puppets be Effective Communicators?
- 22B Love Him and Mek Him Learn
- 22C Some thoughts on the Use of Nonformal Education In The Real World

MATERIALS Newsprint and markers , pictures, equipment, materials, for demonstration.

PROCEDURE

Trainer Note

Before this session ask participants to look through Chapters Two and Five of Helping Health Workers Learn, and Parts II and III of Bridging the Gap for ideas about new ways to use non-formal education techniques and materials. Ask them to think about the techniques used in this training thus far and list some of the techniques that they found particularly useful.

The best way to teach nonformal education techniques is to model their use and to give participants as many opportunities as possible during the training to practice organizing and leading them. Throughout the technical health training sessions there are many different uses of these techniques. You may want to refer to the technical modules (Nutrition, Maternal and Child Health, and Diseases in the Developing World) for practice session topics.

Participants will be leading different parts of this session and practicing several techniques. Ask these activity leaders to practice before the session and to state the objective and what group of people they are aiming to teach.

An alternative is to conduct these activities in the community if you can make arrangements and if participants feel comfortable enough with "live" audiences and have adequate language skills. You could also invite members of the community to participate in the session. If at all possible, have at least one host country staff member present to give his/her perspective on the use of NFE techniques in the local communities.

Continued

Ask two participants to read and adapt one of the stories in Helping Health Workers Learn, Chapter 13 page 6, or adapt a local story to communicate a health message, and read the rest of chapter 13 so that they can lead the story, drama and song activity in step 1. Encourage them to locate props for use in the drama portion of the activity. Ask someone to make up a song (or use one in Helping Health Workers Learn) about the main health messages in the story to sing to a local tune. Depending on the interests of the group, you may want to offer role play and puppets as alternatives to the story-drama. Helping Health Workers Learn and Bridging the Gap are also good sources for these techniques. Read Trainer Attachments 22A (Can Puppets be Effective Communicators?) and 22B (Love Him and Make Him Learn) for case examples of the use of songs and folk drama with puppets in Jamaica and Sri Lanka.

For Step 2, ask two participants to use Handout 22B (Using Pictures to Stimulate Discussion), Handout 22C (Guidelines for Discussion) and Bridging the Gap to select and prepare to lead a discussion using pictures, with one or more of the techniques shown.

For Step 3, ask someone to prepare to demonstrate a procedure such as mixing ORS Solution or weaning food, using the guidelines for demonstrations (Handout 22D) and technical guidelines from sessions such as 31 (Breastfeeding and Weaning Foods), 40 (Rehydration Therapy), and 42 (Sanitation).

During Steps 1, 2, and 3, it is important to follow the NFE activities/techniques with a brief discussion of how it may be used effectively in the field. Allow at least 10 minutes at the end of each of these steps for the processing.

Step 1
(40 min)

Teaching Health Through Stories, Song and Drama

Have the leaders for this activity tell the story, ask someone to repeat the story and ask others to comment on how well the person retold it. Then members of the group should act out the story and discuss what they learned from the story that could apply in their community. Sing a song as well about the main health messages in the story.

After the drama and discussion, process the activity by discussing drama, storytelling and song as health education techniques. Encourage participants to apply their own past experiences as well as the activity just completed and their reading of Helping Health Workers Learn.

Some of the questions to discuss include:
- For what purposes can you use storytelling, songs and drama?
- What are the advantages and limitations of storytelling, songs and drama as health education techniques?
- Why is it important to combine discussion with storytelling and drama?
- In what ways could you use drama, stories and songs in teaching about PHC in your host communities?

Trainer Note

In discussing this and the following techniques it is helpful to summarize participants'comments on a chart such as the following:

Technique	When used	Pros	Cons	Preparations needed

Also relate the selection of the technique to the session objective, noting that some techniques are better than others for particular kinds of objectives such as: problem identification, skill learning, problem solving, evaluation and other kinds of learning experiences.

Give the activity leaders an opportunity to receive feedback on how well they facilitated the activity by asking questions such as:
- What was good about the way the leaders conducted this activity?
- What could be improved the next time they do this kind of an activity?

Step 2
(30 min)

Stimulating Discussion By Using Pictures

Have the participants who prepared for this step demonstrate the use of pictures to stimulate discussion. Encourage them to involve the group as actively as possible and to summarize at the end of the activity other ways that pictures can be used to stimulate discussion of community problems, to assess ongoing projects, or emphasize the need for particular actions such as sanitation measures.

After they finish, lead a discussion of the use of pictures with discussion activities. Ask participants:

- What does the use of pictures contribute to discussions?
- For what purposes could you use pictures and discussion?
- When do you use discussions in general?
- What examples of good discussion techniques were used in the presentations?

Trainer Note

Use Handout 22C (Guidelines for Discussions) to guide the discussion, give the handout to trainees for a reference.

Step 3
(60 min)

Learning By Doing Through Demonstrations

Turn the session over to the person who prepared the demonstration. Make certain that he or she:
- asks one of the participants to repeat the demonstration.
- follows with a group critique of the return demonstration.
- gives all the participants a chance to practice the skill.

At the end of the demonstration activity, lead a discussion on the use of demonstration in health education. Use some of the following questions to guide the discussion:

- In what situations is it best to select demonstration as a health education technique?
- What steps do you follow to prepare and present a good demonstration?
- What are the main advantages and disadvantages of demonstration as a health education technique?
- How can you use demonstrations for health education activities in primary health care?

Trainer Note

Too often people assume that all that is needed for a demonstration is the equipment. Use Handout 22 D (Guidelines for Demonstrations) to focus the discussion on how to prepare and conduct good demonstrations. Distribute the handout for future reference.

In the discussion of demonstrations, make certain that the following points are discussed:

- It is important to prepare and organize all the materials before the demonstration.
- Proceed slowly step-by-step.
- Make certain that everyone can see the demonstration
- Give the participants a chance to practice the procedure or task. Practice is essential to master the hands on skills and perform them effectively.
- Praise correct performance and remedy errors in a pleasant way.

Step 4
(15 min)

Selecting Non-formal Education Techniques

Have participants discuss what they have learned about selecting non-formal education techniques from this and other sessions. Ask them to state some rules of thumb for selection of techniques. You may want to distribute Handout 22A (Training Techniques) to use during the discussion. Ask someone to summarize the rules on a sheet of newsprint.

Trainer Note

Basic questions to ask in selecting techniques include;

- WHO are the learners?
- WHAT do you expect them to be able to do by the end of the activity?
- How can you best INVOLVE THE LEARNERS in the activity?
- What is the PROBLEM? Different kinds of problsms require different kinds of interventions, and different types of techniques. For example:

Continued

Trainer Note

Problem	Type of Action Needed	Possible Health Education Techniques
Lack of knowledge	information	posters, talks, displays, radio, newspapers
Influence of others	support	discussion groups, clubs counselling
Lack of skill	training	demonstrations, case study games, practice
Lack of resources	community organization	community surveys meetings, committees linking with outside resources
Conflict of values	clarification of values	role play, stories drama, games

Step 5
(20 min)

Cultural Considerations in Selecting Nonformal Education Techniques

Ask everyone to take five minutes to recall and list what they have learned about ways that people communicate in the local area, since they arrived at the training site. These lists should include non-verbal as well as verbal communication. Some of the kinds of information they might consider are:

- What types of social situations are most appropriate for exchanging what types of information?
- What local gestures, sayings, clothing styles, and other traditions are used in sharing information or entertainment?
- What objects, pictures or language are restricted to religious events?
- How do people teach children how to behave properly and to perform tasks?

Have participants briefly discuss ways that local communication styles differ significantly from their own and give examples from their experiences. Ask them to discuss ways the communication patterns, cultural practices and differences that they just discussed would affect their selection of nonformal techniques and materials.

Some questions for discussion are:

- Would the techniques and materials used in this and earlier sessions work in the local community? Why or why not?
- How could they adapt some of those techniques and materials to make them more effective in this setting?
- What local traditions can be incorporated in nonformal education? Which should be avoided?
- When might it be inappropriate to use non-formal education techniques in the community?

Have them add these cultural considerations to their list of rules of thumb for selecting training methods and materials and post it for reference in later sessions.

Trainer Note

This step should be coordinated with cross-cultural training. For Preservice Training, it may be necessary to provide some of the answers to these questions. If any host country staff members are participating in the session, ask them to give their perspectives during the discussion in this step. For in-service training, ask participants to describe their host community. Refer to what participants learned about the community in Session 13 (Community Analysis) and Session 14 (Working With the Community). Recommend Community Culture and Care, Chapter 3 (Communication) pages 45-68, and Chapter 4 (Language) for valuable background reading.

Some points that should come out of the discussion include:

- Different life experiences and customs that affect the ways in which people share information such as:
    - Who should talk with whom,
    - What topics different types of people should talk about.
    - Acceptable styles of interaction (direct or indirect conversation, quiet or loud voice, gestures, distance).

Remind the participants that rules for sharing information are learned as a part of growing up in a culture. You may want to raise some of the political and economic issues discussed in Trainer Attachment 22C (Some Thoughts on the Use of Nonformal Education).

TRAINING TECHNIQUES

Here are lots of methods to pick from

	DESCRIPTION	USES
LECTURE	Presentation given to a group by a teacher	a) Introduce a subject b) Give information c) Encourage enthusiasm for a subject
DEMON-STRATION	Presentation which shows people what to do	a) Show a technique, procedure, or process b) Give information
PRACTICAL EXERCISE	Exercise in which participants learn by doing something	a) Develop and then evaluate skills b) To develop self-confidence in performing certain tasks
DISCUSSION	Interaction within a group where everyone states their views on a specific topic	a) Study a question or problem b) Analyse or evaluate a real or simulated experience
CASE STUDY	A description of a specific situation (written or dramatised) which is discussed by a group	a) Discuss problems within a context b) Introduce discussion of similar problems within a case study
PROJECTIVE TECHNIQUES (EG. DRAMA, PICTURES)	Using a stimulus to get individuals to discuss real life situations	Drama or pictures can be used to present problems faced by participants. Both help to "objectify" the situation so that participants can stand back and look at it critically.
ROLE PLAY	Two or more individuals are asked to respond spontaneously to a given situation, by acting and reacting the way they feel their "characters" might in real life.	a) Give individuals opportunity to see others' attitudes, feelings, roles b) Identify alternative ways of solving a problem
SIMULATION	Involve participants in a real life problem situation which requires them to respond and look for alternative solutions.	a) Allow individuals to experience decision-making situation without assuming the consequences of their decisions. b) Examine potential problem and solutions within certain everyday situations.
BRAIN STORMING	Instead of attacking a problem logically, this technique encourages people to suggest many ideas quickly, without evaluating them. Only at a later stage is each idea assessed.	a) Gather many ideas for discussion b) Trigger many ideas c) Acquire spontaneous solutions to problems

(From: Crowley and Etherington. How to Run a Radio Learning Group Campaign. p.114).

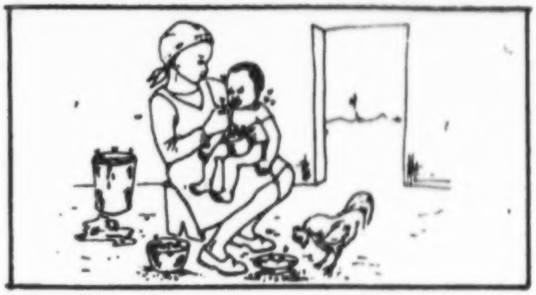
USING PICTURES TO STIMULATE DISCUSSION

There are many ways to use pictures with discussions. A few are listed below. You will find more ideas in Helping Health Workers Learn and Bridging the Gap.

Problem Picture

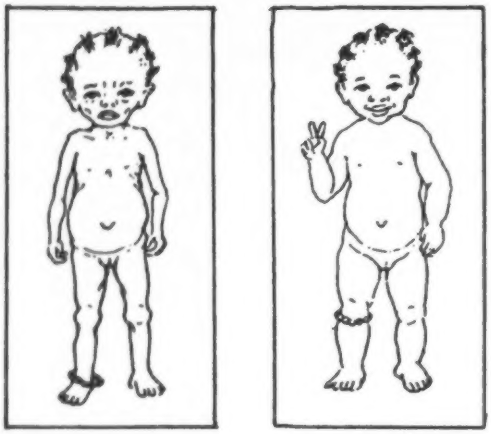
Show a picture illustrating general health problems in the community as a non-threatening way to identify local problems and discuss what can be done about them. A picture such as the one below, and ask people.

- What is happening here?
- What are the reasons this is happening?
- Could this happen where you live?
- What could we do together about these problems?



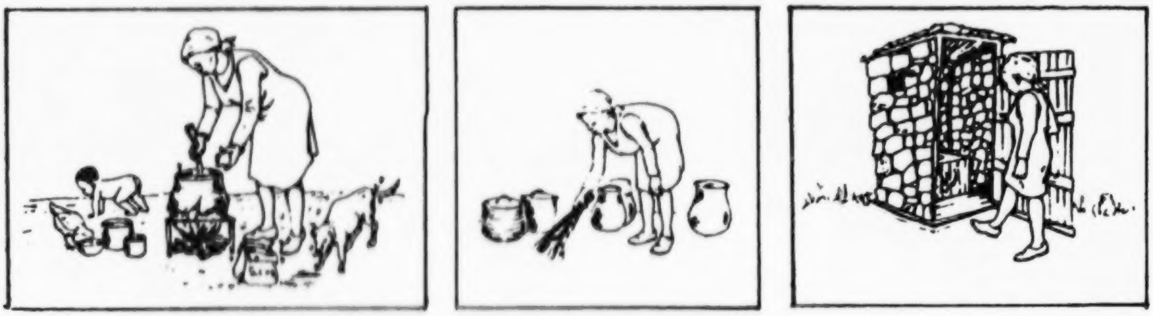
Comparative Pictures

Two pictures, such as the ones below can be used to contrast desirable and undesirable situations, or harmful and beneficial practices. This provides a way to help communities analyze why health problems exist and consider specific alternatives.



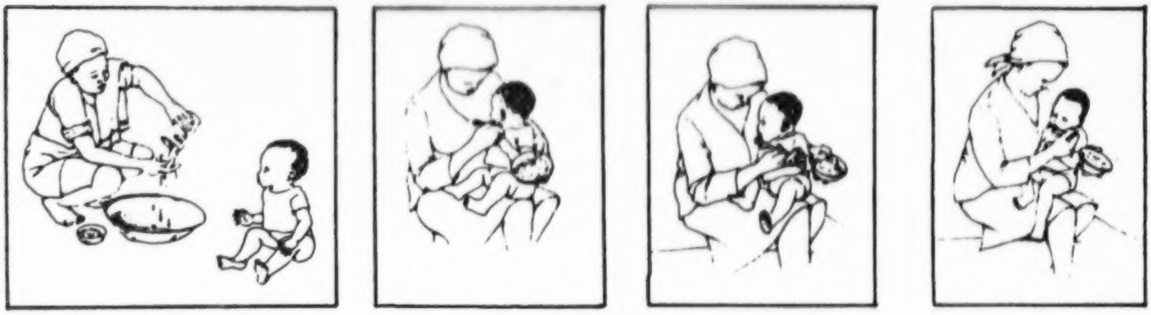
Picture Story with a Gap

This is a story about a health problem in the community that ends with the problem solved. The part of the story that explains the way that the problem was solved is created by community members. This involves them in analysis of their own situation and helps them to set goals.



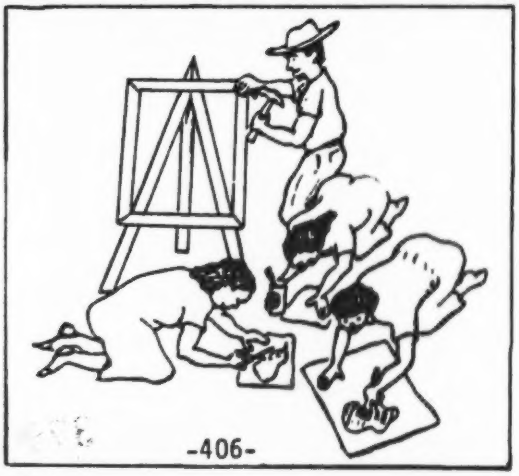
A Picture Series

A picture series can be used by a health educator to tell a health story. Given to Villagers the pictures provide a way to express their feelings, concerns and ideas by creating their own picture story.



Pictures Drawn By Community Members

Drawing pictures of community health problems, goals and is a way that community members can express themselves and examine their perceptions, needs and options.



GUIDELINES FOR USING GROUP DISCUSSION

Prepare

- Decide on your objective for the discussion.
- Prepare some open questions you can ask to start the discussion.
- Collect the visual aids you will use to begin the discussion.
- Practice using the visual aids if this is necessary.
- Find out as much as you can about the participants.
- Look at the place where the discussion will take place.
- Arrange the seating to increase interaction.

Conduct the Discussion

- Start on time.
- Try to make the group feel at ease.
- State your general purpose of the discussion. (It is assumed the you have specific learning ovjectives and this techniques is appropriate.) Ask if it fits their needs.
- Ask participants what are their objectives and explain how they will be covered in the discussion.
- Introduce the topic clearly and concisely.
- Explain the discussion procedures and define its limits.
- Encourage participation by all members.
- Control the over-talkative member.
- Draw out the shy member.
- Don't allowone or more members to monopolize.
- Deal tactfully with irrelevant contributions.
- Avoid personal arguments.
- Keep the discussion moving.
- Keep the discussion on the subject.
- Summarize frequently.
- Use audio-visual aids if available.
- The best discussion is often one in which the trainer talsks only about 20 percent of the time.

Summarize the Discussion

- Review the highlights of the discussion
- Review the conclusions which have been reached.
- Make clear what has been accomplished by the discussion.
- Restate any minority viewpoint.
- Get agreement for any action proposed.

Evaluate

- Watch learners during the discussion to be sure that they remain interested, and not bored and restless.
- Ask learners how well they think the objective of the discussion was accomplished.
- How well do you feel the objective of the discussion was met?

(Adapted from: Teaching and Learning with Visual Aids.)

GUIDELINES FOR DEMONSTRATION

Types of Demonstrations

Method Demonstration: shows how to carry out a skill and explains each step as it is performed.

Result Demonstration: promotes interest and acceptance of a new practice by showing the actual results (benefits).

Method-Result Demonstration: combines the what why when how of an improved practice with physical proof of the benefits.

Conducting Demonstrations

Prepare

- Make certain the topic is timely and relevant.
- List all the steps of the procedure
- Collect and organize all the materials that you will need. Use the same kinds of equipment and materials that your learners will be using.
- Practice the demonstration, perferably in front of friends who also know how to perform the task. Get their feedback on your language, credibility and how easily it is to understand you. If you have difficulty with the language, you may want to use an interpreter.
- Arrange the place where you will give the demonstration so that everyone can see what you are doing.

Demonstrate the Procedure

- Make the demonstration as short and simple as possible.
- Establish rapport with the audience before starting the actual demonstration. You might want to talk with them informally before the session.
- Introduce yourself and state the topic of the demonstration. Immediately explain its relevance to the audience.
- Show the procedure slowly, one step at a time and explain each step as you finish it.
- Involve your learners in the demonstration as much as possible. Some questions you can ask are:
  - What should I do next?
  - Why is it necessary to do it this way rather than another way?

  Make certain that everyone can see the demonstration.
  Encourage questions and stop to answer questions.

Review the Procedure

- Ask one of the participants to repeat the procedure while the others watch to see if they do it properly, and critique the performance when it is finished.
- Give everyone an opportunity to practice the skill.
- Praise correct performance and correct errors pleasantly.
- You may want to prepare a handout that summarizes the steps of the procedure in words and/or pictures as is appropriate for your learners.

Evaluate

- Can the learners repeat the procedure correctly?
- Could everyone see all the steps of the procedure?
- Did learners' questions suggest that the demonstration was confusing in any way?
- If possible arrange to follow up with another group session or home visits to make certain that the participants remember how to perform the procedure correctly and actually use it in their work or homes.

Suggestions for Demonstration Topics

- How to mix ORS solution (see Session 40, Oral Rehydration therapy).

- How to make and use a gourd baby for teaching about oral rehydration (see Helping Health Workers Learn).

- How to mix weaning food (see Session 31, Breastfeeding and Weaning Foods)

- How to assess health status of an infant using a measuring strip (see Helping Health Workers Learn and Session 29, Recognizing Malnutrition)

(Adapted from: Teaching and Learning with Visual Aids.pp.356-357
and Peace Corps Draft Materials.)

Can Puppets Be Effective Communicators?

Primary Health Care and Community Development through Folk Media—An Experiment in the Colombo Slums

by Carol Aloysius

"It is a new experiment that is being tried out to spread the message of Primary Health Care (PHC) to a population that knows very little about health and sanitation."

This novel Programme Support Communications approach, using traditional art forms to convey health messages to the target population, is aimed at supporting an on-going slum upgrading project—the Environmental Health and Community Development Project launched three years ago between the government of Sri Lanka and UNICEF. This is the first time that such a communication project has been formulated to be carried out systematically and comprehensively in Sri Lanka.

A ten-member Committee has now been set up of representatives of government departments such as Colombo Municipal Council, Common Amenities Board, and the Urban Development Authority, to monitor the project which will officially be inaugurated under the name *Jana Udava* (Awakening of the People).

Can drama be considered an effective medium of raising the overall quality of life of a people living well below the poverty line? Can an inanimate object such as a puppet be cast into the role of a communicator of health messages?

Simon, who is the UNICEF Consultant in this novel experiment, gives a positive reply to these questions. "Drama helps to put across any kind of message, especially to an uneducated audience, in a far more tangible and meaningful way than any discussion or film show can." But why Folk Drama? Why not a more modern form of drama? "Because," he explains, "this kind of drama belongs to the kind of people our messages are directed to and can be understood and appreciated by them. As for using puppets for this purpose it was just an experiment carried out to coincide with the traditional puppet shows staged at Vesak. The fact that it was a huge success proves that Puppets can be effective Communicators."

The two puppet shows staged on Vesak day this year were based on the Jataka tales revolving around the life of Lord Buddha. The unique quality about them was that this was the first time that these religious stories were re-written in a modern context to give an insight into the living conditions and innumerable problems of the shanty population in Sri Lanka.

Patachara, the first play, was based on the popular religious tale of an unfortunate woman who falls from society and is finally saved by the Lord Buddha. In the re-interpretation of this story, a rich girl falls in love with her chauffeur and ends up in a slum similar to the shanty garden in which the play was staged. She endures trials similar to those of the slum folk in that garden. The script poignantly describes the extreme poverty and hardships she endures, and the deaths of several of her children through numerous diseases which frequently occur in the shanties due to ignorance and poor sanitation. Finally she turns to prostitution to earn a living. Contracting a venereal disease she nearly ends her life but is saved by a Buddhist nun who helps her to enter the order and find peace of mind.

Throughout the play attention is focussed on the common problems of the Garden population—their dire poverty, malnutrition, the unsanitary living conditions, their lack of education, ignorance of basic health care, and the almost total lack of opportunities to better themselves. It also draws attention to the constant exploitation of these unfortunate people by the society around them.

Kisa Gothami, the second play, revolves around the story of a mother who is unable to reconcile herself to the death of her child until she is finally shown the truth by the Lord Buddha, when he sends her out to find a house in her village where no young child has died. She returns with the sad knowledge that every mother in her village had endured the same tragedy.

In the re-interpreted version of this popular Vesak play, the authors sought to highlight the prevalence of child mortality and morbidity among the slum population

The fact that the plays had been re-written by members of the target audience, who had also been responsible for the entire production, was considered most encouraging since this voluntary gesture of the garden population indicated that an awareness had been created.

The plays had taken only three weeks of intensive preparation. Within that brief period, the UNICEF consultant was able to gather together the most talented youth of the garden and its immediate neighbours, guide them in writing the scripts, let them introduce their own ideas and problems into the plays, and then show them how to assemble the puppets and manipulate them.

This team of 'dramatists in the making' not only prepared excellent scripts complete with the taped voices of about 25 persons in the garden who voiced the different characters in the plays, they also assembled the stage and the sets.

(From: UNICEF. Population Communications Support Newsletter. Volume 7, Number 3, (December 1983). pp. 1,4-6.)

"Love him and mek him learn"

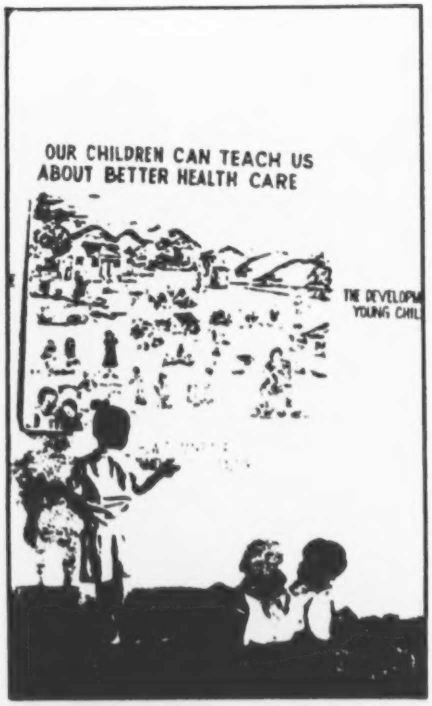
Children in school are a captive audience. In the parish of St. Thomas, Jamaica, they are being taught how to help bring up their own younger brothers and sisters. Parents, teachers, and children are responding well.

St. Thomas has long been regarded as one of the parishes in Jamaica most susceptible to poor health and the outbreak of disease. Many families live in extreme poverty with poor standards of housing, and face other environmental problems which affect the physical and mental development of their children.

Since February 1982 a joint programme involving UNICEF, the Ministries of Health and Education, and the Tropical Metabolism Research Unit (TMRU) of the University of the West Indies, has been making inroads into those conditions. Primary school children are at the heart of the programme, taking part as change agents in a teaching approach which departs from the usual primary school tradition.

Jennifer Knight, the Project Director, describes the results after one year as "very encouraging: we are getting there slowly but surely." The story of the St. Thomas project is, in very large part, the result of her hard work and dedication. Indeed, her indefatigable enthusiasm seems finally to be attracting the attention of the Ministry of Education, with which the programme's long-term prospects rest. According to Jennifer Knight: "Our long term goals are to integrate child health and development, and improve parenting skills throughout the country."

The project is based on the assumption that all aspects of children's development – social, emotional, intellectual, health and growth – are strongly influenced by their environment, including the quality of child-rearing. Parents' practices in hygiene, child-feeding, and adult-child interaction in the home, all affect children's development.


OUR CHILDREN CAN TEACH US ABOUT BETTER HEALTH CARE
THE DEVELOPM
YOUNG CHIL

Children are themselves seen as agents who can affect home health practices. Photo: Cunningham

In St. Thomas, parents of very poor children do not have the right knowledge about hygiene and child feeding. They also fail to appreciate the importance of play. So children often fail to develop to their physical and mental best. In addition, health and social services are often inadequate at present, particularly in remote rural areas.

According to Jennifer Knight, the St. Thomas project took a new approach to solving these problems by using primary school children. Initially, the programme involved seven primary schools in the western part of the parish and later extended to the eastern side, gradually encompassing all the primary schools in the parish. The children were taught basic child rearing practices, focussing on hygiene, child-feeding and child development.

Another objective is to help the school children become good parents in their turn, and to improve the care received at present by younger siblings. Even the parents' knowledge and skills can be improved by their children. And the programme also seeks to improve teachers' knowledge.

The idea is to use the educational services to promote the health of the community.

Children themselves are agents of change

In most Caribbean countries, primary school education is free. Schools have in the main only been used for traditional educational purposes. However, primary schools are a natural channel for services aimed at improving the health and development of young children. They present a captive audience of older children who can be used as agents of change. Large families usually have children whose ages are spread over a wide range, and older children are expected to share in the care of the younger ones. In addition, Jamaica recently introduced compulsory education, which has helped to improve school attendance. Teachers are very respected members of the community.

Initially, working with children in Grade IV (9-11 years old), the programme concentrated on teaching three main topics: young child nutrition; promoting a healthy and safe environment; and child development.

This article has been edited by Claire Forrester, a Jamaican journalist, from a paper written by Jennifer Knight, Director of the St. Thomas project.

When de baby reach four
months old
things that you should
porridge from spoon

Active and participatory learning through songs and jingles teaches children about health and development. Photo: Cunningham

Two weekly workshops were conducted with 14 teachers from grade levels four and five, for one school year. Teachers were given detailed lesson plans with ideas and activities. They were encouraged to develop these and to discuss the children's response to the lessons. Modifications were made to ensure that lessons were easily understood and enjoyable. Much discussion took place on health problems, and measures they could use to solve them.

The approach stressed participatory activities for the children rather than didactic teaching, stimulating the children's interest, and motivating them to take home child health messages to their parents and to look after their younger brothers and sisters more competently.

A series of songs and jingles was compiled, using folklore music and the Jamaican dialect, emphasizing all the important child health and development themes. Pictures were designed, which the children coloured and took home. Mindful that the reading level of both the parents and the children was poor, the messages were largely pictoral although a few simple words were added.

Jennifer Knight reports that the project implementors found a higher level of illiteracy in the schools than anticipated but encountered a wide range of abilities among the children. Accordingly, only very basic child health and development messages were used in the curriculum, focussing on preventive activities.

Food for growth

In the first semester, children were taught about the importance of food for the young child's growth, especially in the early years when children grow rapidly. The following lines from one of the songs sharpen the point:

"When de baby reach four months old
There are things you should be told
Give the thick porridge from a spoon
and dish
And den you will get all that you wish..."

The values of breast-feeding the child at the right time was also emphasized. The chorus of the same song brings out the message:

"She get di breastmilk
(day and night)
She get it for a year
(oh yes)
She never get sick
(oh no)."

They were taught when to introduce porridge, how to serve food to the young and when to introduce the baby to the family pot:

"She can eat foods from de pot
(at six months)
All de vegetables fruit and meat
(one, one)
All de mashed foods, fish and peas
(oh yes)
Mek sure dem all nice and clean
(ooh yes)."

In the second semester, the children were taught how to make their environment a safe and healthy place to live in. These lessons emphasized that germs caused diseases; that certain insects and animals carry them; and showed how mosquitoes can be controlled.

Jingles also focussed on personal hygiene and proper food preparation:

"Germs like dirt
And garbage too
Germs will make you sick
Keep germs out
Germs like food
Dirty hands too."

(From: UNICEF News Issue 119, 1984, pp. 12-14.)

SOME THOUGHTS ON THE USE OF NON-FORMAL EDUCATION IN THE REAL WORLD

Susan Emrich

In recent years there has been a great deal of interest in the use of non-formal techniques of education for training of health and development workers. The term is often ill-defined and misunderstood, but in practice it usually means the use of techniques that encourage active participation of the members of a group in learning through a process of identification of a real problem, examination of the problem as a group and discovery of possible actions the group can take to solve the problem. The "something" being learned is frequently a piece of information or a technical skill, but the non-formal method of problem solving is learned at the same time.

Non-formal education used as a technique to teach more or less technical skills has its applications, but in practice it walks an unsteady line between its origins in philosophies of education as liberation or political consciousness raising, and conventional schooling. The outcome of the use of these techniques depends greatly on the composition of the group, the orientation of the group leader, and the surrounding social-political climate.

The use of non-formal techniques, when they work at all, quickly breaks down the formal teacher-student relationship and establishes a relationship of equality and mutual responsibility for learning. This seems to be an obvious and desirable step, but in the context of political or racial repression it is literally explosive. The simple fact of treating oppressed people with respect, listening, and providing a place where they can work together is a much stronger message than whatever the topic of the class was supposed to be. This is especially true of groups with no schooling.

Groups of unschooled peasants make very little separation between perceiving the solution to a problem and the action to implement the solution. They may be slow to become convinced, but they are very quick to move on to concrete action, and that is where they come into conflict with the constraints of the prevailing social-political system. More sophisticated groups, on the other hand, can work through a non-formal exercise very smoothly and come to all the right conclusions, but they are much less likely to carry their conclusions into action, and so are less likely to come into conflict with the harder realities of their situation.

The group leader who uses non-formal techniques may find that the techniques lead him into territory he hadn't planned to explore or to conclusions that weren't part of his private curriculum. This style of learning is a group process that may be very difficult for the leader to control. The following are a few examples among many from personal experience.

An Indian health promoter was trying out a new teaching aid with a group of Indian women. The material was a set of pictures about prenatal care. She showed the first picture to the group. It was a dull enough picture of a white coated male doctor, talking to a pregnant Indian woman. The promoter asked what the group saw in the picture. The replies came hesitantly at first, then in an angry flood: "He's scolding her", "He says she came too late", "He's telling her she has to go to his private clinic and pay a lot of money", "He doesn't want to touch her", "She is sad and wants to go home", "She can't understand his Spanish."

At this point the promoter had a choice between talking about the reality or continuing the fiction of talking about prenatal care which in practice is inaccessible to most people because of inadequate facilities, corruption and racist attitudes.

Another time I was teaching nutrition to a group of health promoters in a part of the country that is notorious for low wages. There were some very poor-looking people in the group including a young man whose skin and hair showed signs of vitamin deficiencies. I used a market game to teach price comparisons and the nutritional value of foods. Each person "buys" the foods he thinks best with the amount of money that he normally has to spend in a day for food. The foods can be real or pictures but they must be common, local and not expensive. The group evaluates each person's buying to decide how well they did with the money they had. The game went well with a lot of good natured joking and a minimum of technical information from me. When we got to the young man he said that he could not buy any of those common foods and in fact had not bought them for years. He was earning $.60 per day for plantation labor and had no other resources. His first two children had died of kwashiorkor and the third was born small and soon died. He said that his wife had stopped menstruating even though she wasn't pregnant and he wanted to know what nutritional advice I could give him for her. I had to say that there was no nutritional advice I could give him but that he and his wife should get away from that plantation and look for something else before they starved to death. Then another young man said the only real answer is to change the system that creates such poverty. I said yes but that was outside the limits of what I could allow the group to discuss in an open public meeting. The class broke up after that: most had learned a little nutrition and all felt bitter and frustrated at the young promoter's situation, and at my refusal to talk about it which they saw as hypocrisy.

In both of these examples the intrinsic power of the educational method combined with the reality of the people had overwhelmed the intended contents or subject matter. Non-formal education cannot be easily separated out into techniques for training on the one hand, and political awareness on the other. This is probably true of education in general but the particular power of non-formal education is that it is a collective process which promotes cohesion and cooperation within a group. The group as a whole discovers their problems, reaches conclusions and desires actions, which have a greater or lesser political impact. The same number of people reaching the same conclusions one at a time in isolation, if that were possible, would not have the impact or visibility of a group, and would not be able to carry their conclusions into action. Because of the things that the group is able to accomplish they become visible and may become targets for political repression.

Successful health education is especially likely to lead to visible action. One of the goals of health education is to get people to give up their magical view of disease causation for an understanding of cause and effect, and the use of non-formal group techniques is quite effective in this respect. However, the fact that most of the people have a magical view of disease is one of the corner-stones of the social-political system as a whole. If through successful health education people come to accept a cause and effect explanation of disease they will start to feel the need for actions that the system is in no way willing to allow, and for services that the system can't or won't provide. In fact the magical view of disease causation can be seen as an adaptation of the culture to a situation of extreme helplessness maintained over a long period of time. It may be the only way for the people to avoid frustrating and dangerous conflict with the system. When a health worker is effective at helping people to discover cause and effect relationships and abandon their magical view of disease he himself becomes identified as a leader and becomes highly visible.

The health or development promoter often uses techniques that he has been taught to use in the relative safety of an officially approved course, given by government workers or foreign volunteers. In this setting he is protected by the status of an institution which has at least tacit support of the authorities; and by the composition of the group which will most likely be made up of schooled people who are used to playing with ideas and will not be inclined to take direct action of any sort. When he uses the same techniques with the illiterate peasants of the village all of these conditions change and he may be put in a very vulnerable position.

When non-formal techniques are used as a political tool, the group leader presumably knows where he is going and how to protect himself, but when they are used for other ends, the leader is often quite naive about the implications of what he is doing. If the attitude of the promoter is at times naive, the attitude of the agencies is more than naive: it is irresponsible. Both government and private agencies set up and finance programs to train promoters with very narrow, short-term goals in mind. Training in non-formal education is a means to the end of having X number of latrines installed within Y number of months, or some percentage increase or decrease in malnutrition.

But the use of non-formal education and the formation of cohesive, active groups in the community will not just go away once the latrines are built. People who learn how to analyze what is wrong with their water system are quite likely to move on next to what is wrong with their political system. And while the agency may have prepared people very well to deal with the water system, they probably did nothing to prepare

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them to deal with the political system. The agencies and the people who work for them should be willing to admit that their project, whatever it is, exists within an historical context and will inevitably influence that history. In the context of social-political change, there simply are no neutral actions. They should also realize that the people they train will become active participants in historical processes and need preparation for political understanding and action at least as much as they need preparation in technical matters. To fail to do this is irresponsible and in really bad times comes to resemble a form of human sacrifice.

(Emrich. The Training and Support of Primary Health Care Workers. pp.68-71.)

Session 23

SELECTING AND USING VISUAL AIDS

TOTAL TIME 3 hours, 30 minutes

OVERVIEW

In Session 22 (Selecting and Using Nonformal Education Techniques) participants practiced using pictures to stimulate discussion, and discovered the effectiveness of combining visual aids with nonformal techniques. In this session they focus on visual aids, looking at other ways that they can use these aids in health education. They develop cultural, educational and design criteria for selecting visual aids and practice selecting visual aids for specific teaching situations.

OBJECTIVES

- To describe ways that visual aids can be used to help learning and understanding.
  (Step 1, 2)
- To select appropriate visual aids for a teaching situation, using criteria developed during the session.
  (Steps 3, 4, 5, 6)
- To use visual aids efficiently and skillfully.
  (Step 7)

RESOURCES

- *Teaching and Learning With Visual Aids*
- Audiovisual/Communications Teaching Aids Teaching Aids Resource Packet P8 (Peace Corps)
- *Helping Health Workers Learn*, Chapter 11
- *Bridging the Gap*
- On the People's Wavelength: Communications for Social Change, (*UNICEF News* 114/4)

Handouts:

- 23A Ways Visual Aids Help People Learn and Remember
- 23B Why Pictures Fail to Convey Ideas
- 23C Design Considerations
- 23D Using Pictures to Communicate Effectively
- 23E Using Visual Aids

Trainer Attachments
- 23A Why Use Visual Aids?
- 23B Villagers Teaching Us to teach them
- 23C Examples of Teaching Situations

MATERIALS Examples of as many different kinds of visual aids as possible, newsprint, markers, pencils, paper for drawing.

PROCEDURE

Trainer Note

Prior to the session ask participants to look through Chapter 11 of Helping Health Workers Learn (Making and Using Teaching Aids) and identify at least one new use of visual aids that they would like to try out during this training course. Ask three participants to work with you to prepare and demonstrate effective uses of visual aids.

Also ask a few people to locate as many examples of different kinds of visual aids as possible and to arrange or display them in the training room. Include in the display all the visual aids used in the training program thusfar. Assign this task enough in advance to enable them to visit local agencies to collect or borrow visual aids.

Ask two people to help you locate or prepare visual aids that illustrate the design considerations shown in Handout 23C (Design Considerations). Ask for one good and one bad example for each consideration.

Ask two people to help prepare a demonstration of how to use visual aids. Focus on the actual handling of the material, timing (when to show a visual) and making sure it can be seen. Use Handout 23 E (Using Visual Aids) as a guide. Have them prepare "good" and "bad" demonstrations to highlight what to do and what not to do.

Trainer Attachment 23A includes a short activity that you can use to introduce this session if time allows.

Step 1
(60 min)

Ways Visual Aids Help People Learn and Remember

Demonstrate at least three different effective uses of visual aids, for specific teaching situations with the help of the participants who prepared the demonstration with you. For each demonstration, state the objective, and describe the target group. After each one, discuss questions such as the following:

- What did you like best about the ways visual aids were used here?
- What did you like least?
- What differenct ways could you use this visual aid?

After all the demonstrations are finished, facilitate a discussion using the following kinds of questions:

- What kinds of information are best communicated using visual aids?
- How can visual aids strengthen nonformal education techniques?
- Can visual aids stand on their own for communicating health messages?
- What are some examples of effective use of visual aids during this training program? In your experience before the program?

Trainer Note

Be sure that you demonstrate the use of visual aids when they are needed and not just added because you want to use a visual aid. The visual aids should be appropriate for the objectives, the learners, and communicate effectively (Following the Design Considerations in Handout 23C). Do short, focused demonstrations and where possible include combinations of visual aids and health education techniques not yet used or used in different ways in previous sessions. Handout 23A (Ways Visual Aids Help People Learn and Remember) and Helping Health Workers Learn offer many ideas. Also, follow the suggestions for Handout 23E (Using Visual Aids). The group will refer back to this demonstration in their discussion in Step 7. Select topics in the primary health care areas covered in the training.

Continued

The outcome of the discussion should be answers to the questions:
- why use visual aids? and
- when should I use visual aids?

You should also have a list of ideas for teaching more effectively using visual aids. Make sure that the discussion includes use of visual aids to increase the participation of the learners, to identify and solve problems, evaluate projects and learning-by-doing using visual aids problem solving as well as communicating health information. You can also write and discuss this Chinese proverb: "I hear I forget; I see I remember; if I do it I know it".

Step 2
(15 min)

Gallery Tour of Visual Aids

Give participants 15 minutes to make a "gallery tour" of the visual aids arranged in the display. Ask them to choose a partner for the "tour" . Have the partners discuss ways to use these materials in their work and share creative ways that they have used visual aids in the past. Encourage them to pick up the visual aids and think about the ideas for using visual aids that they read about in Helping Health Workers Learn. At the end of this activity give them Handout 23A (Ways Visual Aids Help People Learn and Remember) as a reference.

Step 3
(20 min)

Selecting Visual Aids for the Local Community

Briefly summarize and discuss Trainer Attachment 23B (Villagers Teaching Us to Teach Them) or a similar example to highlight the importance of involving the community in selecting (or developing) and using pictures for health education. After the discussion Distribute Handout 23B (Why Pictures Fail to Convey Ideas) as a reference.

Trainer Note

Some of ideas that should come out of the discussion include:

- Consider local beliefs, customs, design preferences, meaning associated with colors, and familiar things such as clothing, houses, and household goods.
- Use a variety of visual aids when possible.
- Use the real thing rather than a picture whenever possible.
- Select media that involve the learners in the session.
- Involve the learners in selecting and making visual aids.

If possible this activity should be coordinated with cross cultural and language training.

Step 4
(20 min)

Selecting Well-Designed Pictures

Show the group the pairs of pictures prepared earlier to illustrate the design considerations in Handout 23C (Design Considerations). For each pair of pictures, ask the group which picture is better? When they decide, ask them what makes one picture better than the other. Ask someone to make up a simple rule for choosing well-designed visual aids, based on each comparison.

Distribute Handout 23C (Design Considerations) as a summary. Briefly discuss how the list on the wall is similar to the list of considerations in the handout.

Trainer Note

The outcome of the discussion should be a list of rules about what makes a good visual aid. Make sure that the points on Handout 23C (Design Considerations) come out in the discussion. Emphasize the importance of simplicity. Note that the most common error in visual aids is including too much information. A good guideline is to include only one main idea in a picture. Also make it clear that the rule of thumb, "Use simple visual messages", does not assume a simple minded target audience. Nor does it imply omitting important information. Instead it means to identify what is necessary, as opposed to "nice" to know and to present that information step by step, one idea at a time.

Step 5
(20 min)

Practice Selecting Visual Aids

Divide into small groups. Give each group an example of a teaching situation, using Trainer Attachment 23C (Examples of Sample Teaching Situations) as a guide. Ask them to apply what they have just learned about cultural and design considerations along with their earlier discussions of objectives to decide and discuss how they would select visual aids for that session. Ask them to select visual aids, if appropriate, from those displayed in the room and be prepared to explain their selection criteria and their choice to the other groups.

Step 6
(40 min)

Sharing Visual Aids Selections

Reconvene the large group. Ask each small group to report their conclusions and show the visual aid selected. After each report have the others assess the criteria used to select the visual aids and how well the visual aids fit the criteria.

After the reports, ask the participants to agree on three or four main criteria to use in selecting visual aids. Ask someone to summarize these on newsprint for future use. At the end of the discussion distribute Handout 23D (Using Pictures to Communicate Effectively) as a reference.

Trainer Note

The following are the most important criteria for selecting visual aids:

- Skills, knowledge, attitudes, or organization stated in your health education objectives are accomplished more effectively and easily using visual aids.
- The visual aid is culturally appropriate.
- The visual aid is well-designed; it communicated the intended message clearly and simply.
- The visual aid works well with the health education techniques that you have chosen.

Step 7
(20 min)

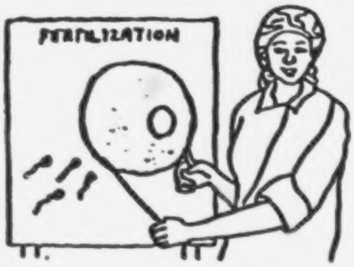
Demonstration of How to Use Visual Aids

Ask the pre-selected people to demonstrate good and bad techniques for using visual aids, acting out the guidelines in Handout 23E (Using Visual Aids). Ask the group to compare the two demonstrations and identify what was wrong with the bad example and what was good about the good example. Also, discuss the use (handling skill in presentation, timing) of visual aids in the demonstrations at the beginning of the session. Distribute Handout 23E and add ideas based on the discussion.

Close the session by explaining that they will be applying these skills in selecting and using visual aids in Session 25 (Designing and Evaluating Health Education Sesssions) and in their final project presentations (Session 27).

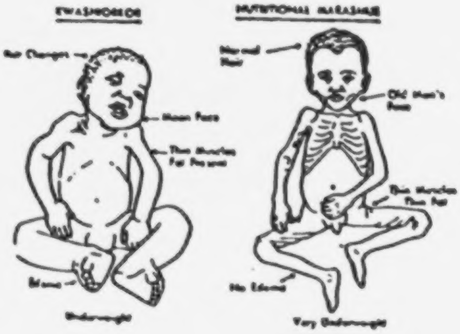
WAYS VISUAL AIDS HELP PEOPLE LEARN AND REMEMBER

1. Visual aids can make something small look larger. A large picture of the inner ear can help students study the small parts. A drawing or poster of an egg and sperm help learners understand what these things look like. Because the pictures are much larger than real life, learners can study them carefully.

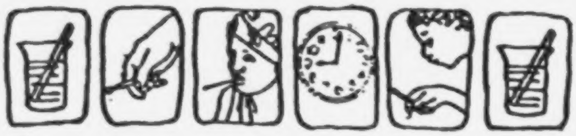


2. Visual aids help us compare the similarities and differences between two things. Show your learners pictures of two similar objects side by side, and they can look at the pictures and identify which things are the same and which are different.

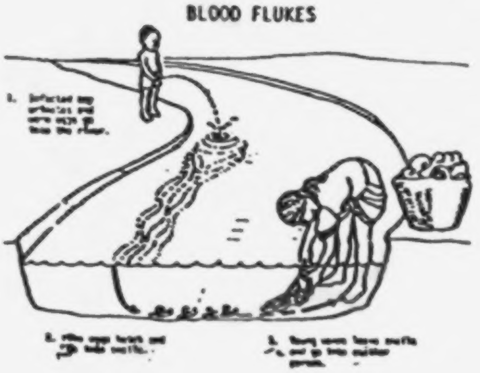
   The illustration here shows the drawings one nursing school instructor uses to teach her students about the differences in appearance of children with kwashiorkor and children with marasmus. She uses the pictures to help them learn the basic information, and then takes them to the clinic to see real children with these conditions.



3. Visual aids are an excellent way to show the steps to follow in doing a task. Mr. Kamwengu, a nurse tutor, uses a series of pictures like the ones here to teach his students how to take temperatures.



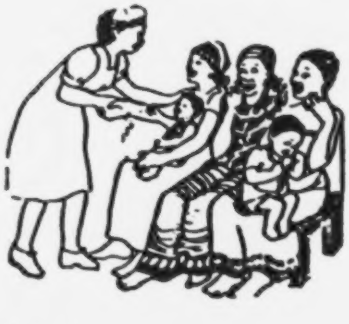
4. Pictures can show how something changes or grows. One picture can show all the changes which take place. These kinds of pictures are good for showing how something happens. The example here shows how blood flukes spread schistosomiasis.



5. Visual aids can help learning by providing a basis for discussion. Most of the time, you want to be sure that everyone who looks at your visual aid will understand the same message. But sometimes it is valuable to use a visual aid which can be interpreted in more than one way.

   You could use this picture as the basis for a discussion by asking, "What do you think this picture is about?" Often this is the only question you will need to ask. To keep the discussion going, you might ask other questions such as the ones below.

   - Who are these people?
   - What is happening in the picture?
   - How do the people feel about it?



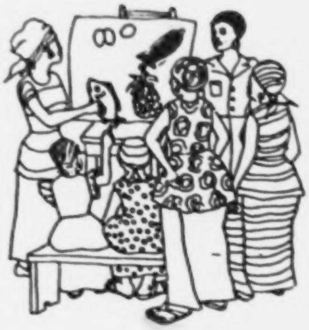
You can use other pictures like this one to start discussions in which the learners explore their own needs, feelings, attitudes, and expectations. For learners who will be doing any counseling, this knowledge and discussion of their prejudices and feelings is very important.

Pictures like this are also useful in community health work. A group discussion helps you learn quickly how the villagers feel about many things, and what problems need to be solved in the community.

Discussing their interpretations of pictures encourages people to observe, think and question carefully and critically.

6. You can also use visual aids to review or test your learners to see if they really understand. After instruction, you can ask learners to identify or explain parts of a picture or other visual aid.

   Flannelboards are very good for this kind of review, and learners seem to enjoy the activity. The community health worker in the picture here uses a folded blanket wrapped around a piece of wood as a flannelboard. She has been teaching the village women about nutrition, using the flannelboard as she talked about food groups. Afterward, she asks her learners to come up and place each food in its proper group on the board.



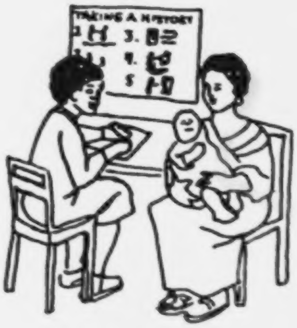
7. Visual aids can provide information when the trainer cannot be present. You cannot always be present when someone needs to ask you about something. Sometimes you have other work you must do or you must be somewhere else.

   For example, Mrs. Macalou directs a community health clinic. She has one nurse's aid working for her full time. Mrs. Macalou needed to make time to see more clients at the clinic.

   Mrs. Macalou made a poster to put over the table where clients check into the clinic. The poster shows the steps her aide should go through in taking a client's history and recording the person's complaint.

   Now when her aide comes to work, she can help Mrs. Macalou by seeing all of the clients first. If Mrs. Macalou must be out of the clinic, the aide can still record the client's history and complaint.

   Mrs. Macalou can come back to the clinic, look at the histories, and decide quickly which patients need to be seen first.



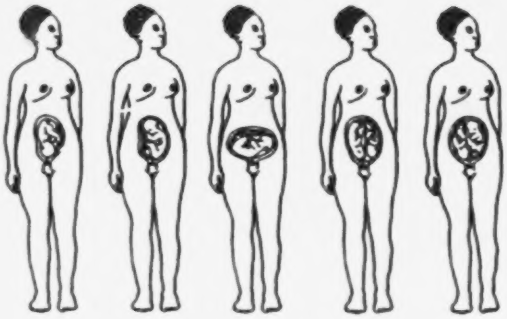
8. Visual aids can show people something they can't see in real life. The section on how visual aids can make small things look larger mentioned that visual aids help learners see things such as cells, which are impossible to see unless you use a microscope because they are too small.

Sometimes it is impossible to see things in real life for other reasons as well.

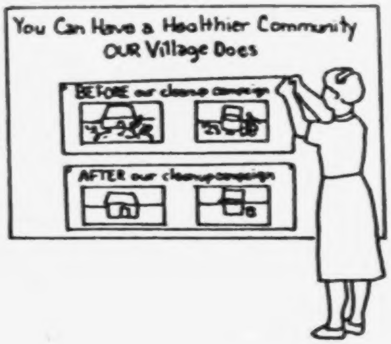
Sometimes a visual aid is useful to show something that cannot be seen because it is inside the body.

Mrs. Hasan is a community health worker. She uses diagrams like the ones here to teach traditional birth attendants about the different positions the baby can have in the womb.

She discusses the pictures with the traditional birth attendants. Then she shows them how to feel the womb of a pregnant woman for the baby's head and buttocks.



You can also use visual aids to show your learners things which are impossible to visit in real life. You can show them pictures of an activity in a village which is too far away for them to visit. The nurse in the picture here has used drawings to make a display which she can use in clinic presentations.

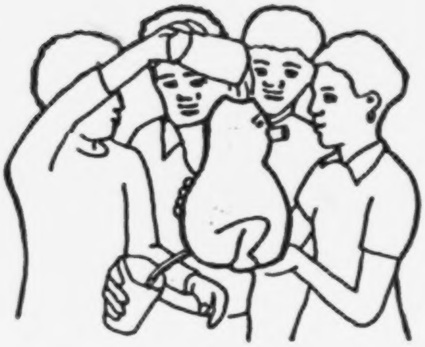

You Can Have a Healthier Community
OUR Village Does
BEFORE our cleanup campaign
AFTER our cleanup campaign

Some other examples of how visual aids can show us things that are impossible to see in real life are:

- a nursing instructor uses a series of pictures when explaining the growth of the fetus
- a nurse/midwife uses a paper cut-out held against her body to show mothers what the womb looks like and where it is located in the body.

9. Making their own visual aids is very useful in helping learners discover solutions to problems. When learners make their own aids and discover the answers for themselves, learning becomes an adventure. When people are having fun learning, they remember what they learn.

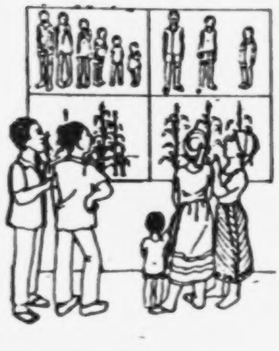
   Mothers and children can learn about diarrhea and dehydration by making their own "baby" from clay, tin cans, plastic bottles, or gourds. They can experiment with the principle of rehydration by pouring water into the "baby" and mending the different holes with "food."



10. Visual aids can make a difficult idea easier to understand. They do this by showing familiar people and things which illustrate the idea.

    For example, suppose a nurse is counselling a family about the benefits of child spacing. She tells the family how child spacing means better health for the mother and for the children. But this is a new idea to the family. It is difficult to understand, because they do not know any other families who use child-spacing.

    So the nurse shows the family some pictures which compare child spacing to the spacing of crops. Then the family begins to understand. They know from their experience that crops grow better if they are not planted too close together.

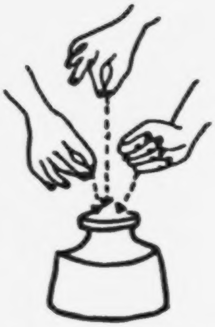


(From: Teaching and Learning With Visual Aids. pp.29-41)

WHY PICTURES FAIL TO CONVEY IDEAS

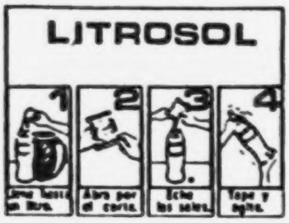
1. Villagers who are not used to looking at pictures may find it difficult to see what objects are shown in the picture.

"Reading" pictures is easier than reading words, but people have to learn to "read" pictures. This picture, intended to show how oral rehydration fluid is made at home, was shown to 410 villagers. Only 69 of them realized it was a picture of hands putting something into a pot. Ninety-nine others could see the hands but could not suggest what they might be doing. And the rest of the villagers (242 people) did not see the hands at all--82 of them thought it was a picture of flowers or a plant.



2. Villagers do not expect to receive ideas from pictures, and must be taught that pictures can instruct.

Staff members of the Honduran project, PROCOMSI, wanted to develop a set of visual instructions to remind mothers how to prepare a solution of oral rehydration salts from a packet. The question was whether the instructions would work without teaching. The mothers were handed the packet of salts with the visual instructions facing up.



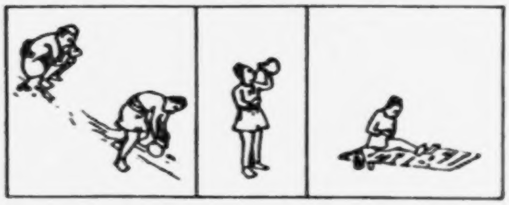
None of the mothers perceived the series of drawings as "instructions." They seemed to think that the pictures were simply a product label. Several women tried to read the written instructions printed on the back of the packet but were able to understand only a few words. After no more than fifteen seconds of looking at the packet, most mothers opened it and began mixing the salts in water which was available near the test site.

A later stage of the test consisted of pointing out to the mothers that the visuals were intended to convey information and "teaching" them what the series of drawings meant. This proved very easy, and mothers understood almost instantly.

3. Villagers tend to "read" pictures very literally. That is, even if they recognize the objects or people represented in the picture, they may not attempt to see any link between the objects, or any meaning behind the picture.

4. Villagers do not necessarily look at a series of pictures from left to right, or assume that there is any connection between the pictures in a series. This series of drawings is intended to show one way in which diarrheal diseases are spread. It was tested in the Nepal study.

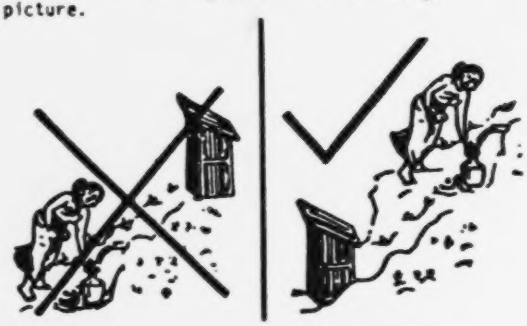
Less than half of the 410 villagers in the study looked at these pictures in order from left to right (37% of them looked at the middle picture first.) Hardly any of the villagers appeared to think that the pictures were related to each other.



Visually "illiterate" people do not "fill" in missing steps. Each message or step must be conveyed with another picture.

5. Pictures which try to convey ideas or instructions often use symbols which are not understood by villagers.

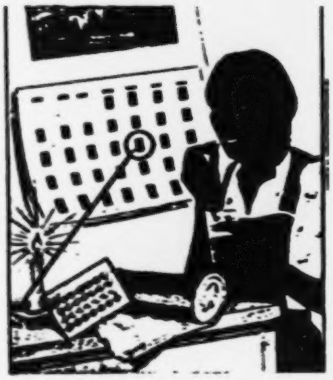
For instance, villagers may never have learned that a check mark can mean "right" or "good" and an "X" stands for "wrong" or "bad." Thus, symbols such as these are often misunderstood or simply ignored.



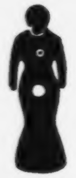
6. Symbols which represent a concept in one culture do not necessarily convey the same idea to another group of people.

Visual perception varies greatly from culture to culture. Finding the right picture to transmit an idea is usually harder and more complicated than picking the right word.

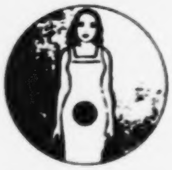
For example, in looking for a visual symbol to represent "menstruation," PIACT designers tried a number of symbols: in Mexico, a Kotex (brand of sanitary napkins) box was originally tested, but proved to be a satisfactory symbol only among urhan women; a drawing of a roll of cotton was more successful in suggesting menstruation. In Bangladesh, a red spot at the back of a woman's sari was widely recognized to represent menstruation; in the Philippines, a red dot at the front of a woman's dress along with a calendar showing a date encircled were found to convey the idea.



Mexico: Cotton roll and calendar



Bangladesh: Red spot at back of woman's sari

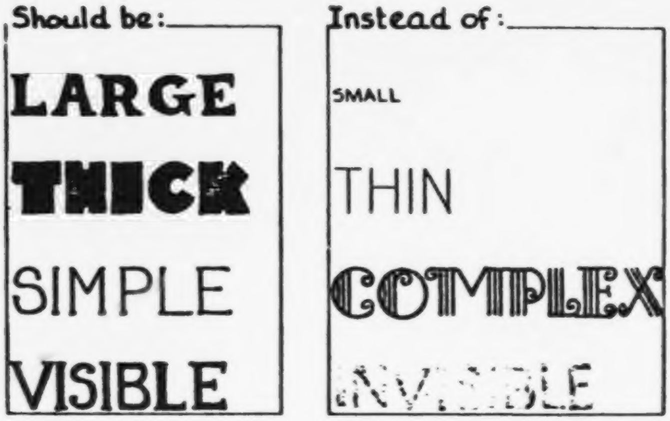


Philippines: Red dot at front of woman's dress

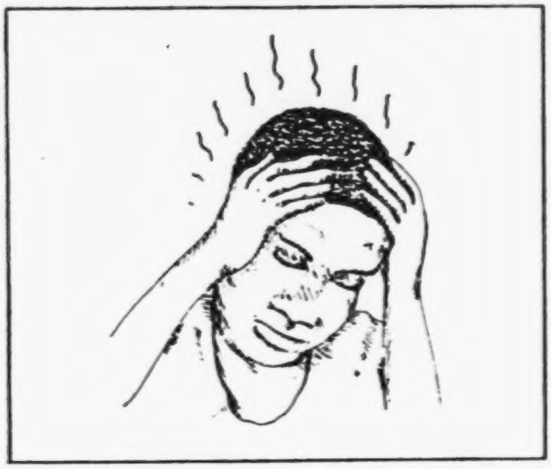
(From: Population Communication Services, "Print Materials For Non-Readers").

DESIGN CONSIDERATIONS

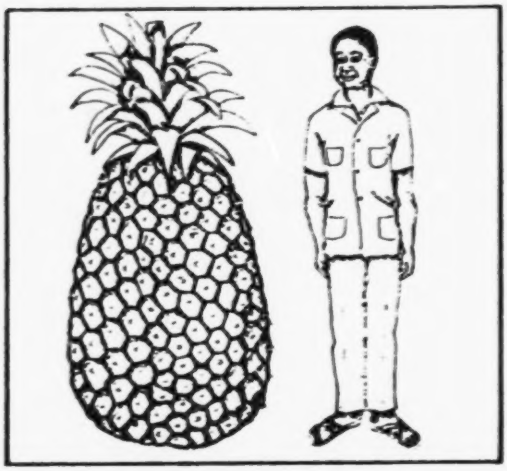
1. Are the Pictures and Words easy to see?

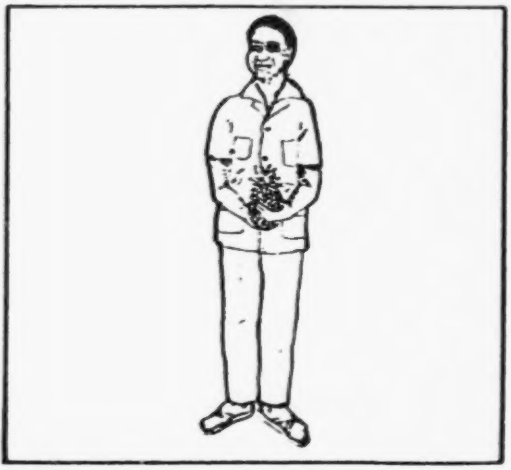

Should be:
LARGE
THICK
SIMPLE
VISIBLE
Instead of:
SMALL
THIN
COMPLEX
INVISIBLE

2. Are the pictures and words easy to understand?
   a) are unfamiliar words or graphic symbols used?

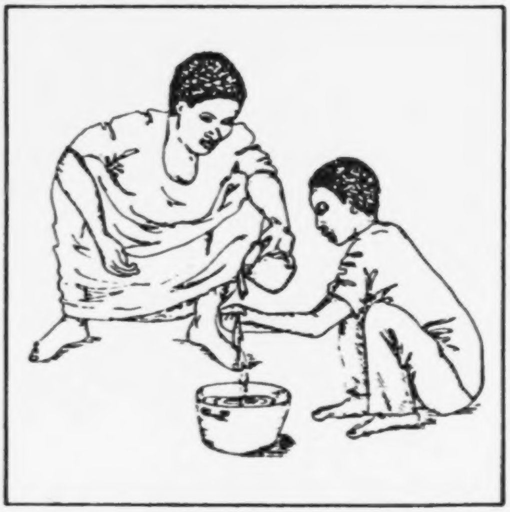


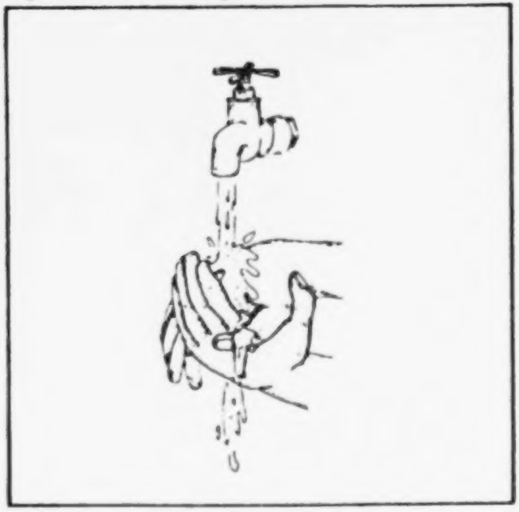
   b) are all figures and objects in the same scale?





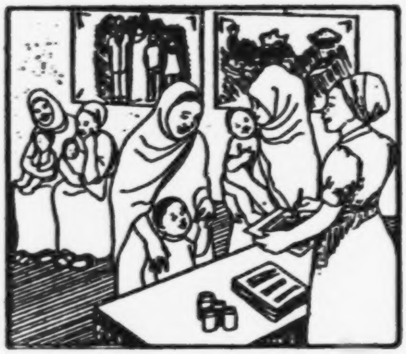
c) are full figures shown before showing parts of figures?

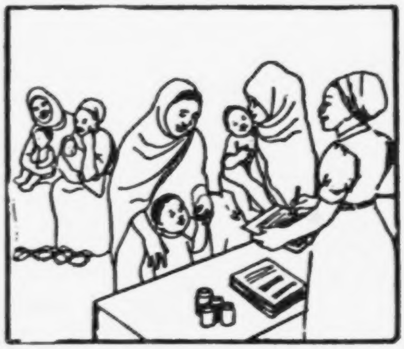




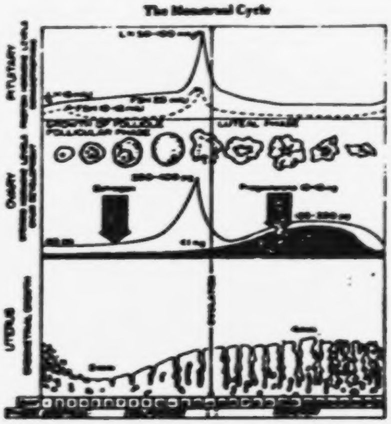
3. Is the information presented clearly and simply?

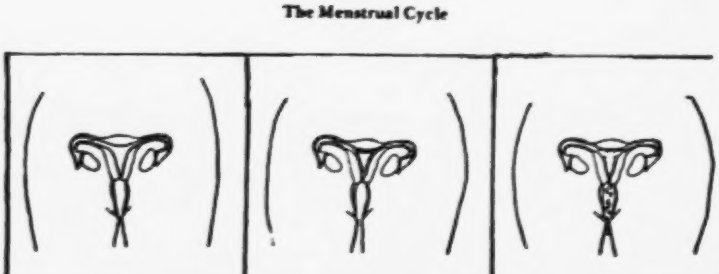
   a) are there any unnecessary details?



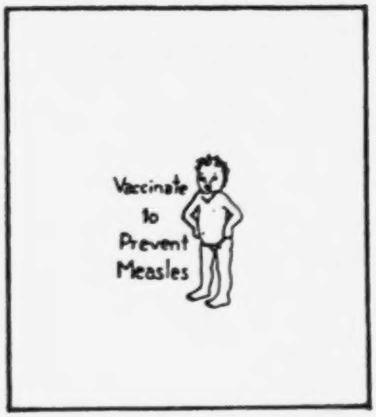


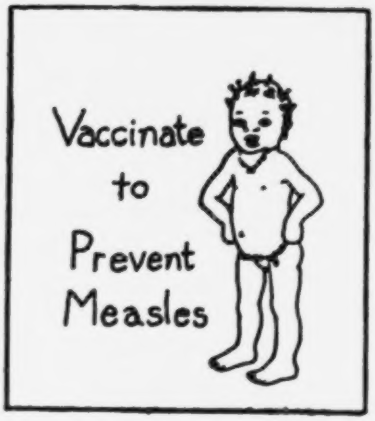
b) Is there one main idea for each picture?



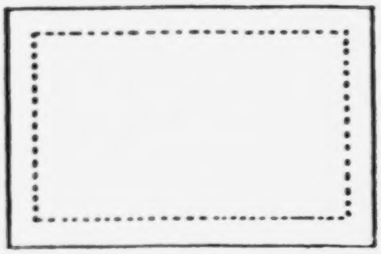


4. Is each picture well organized?
   a) does the picture fill the space?

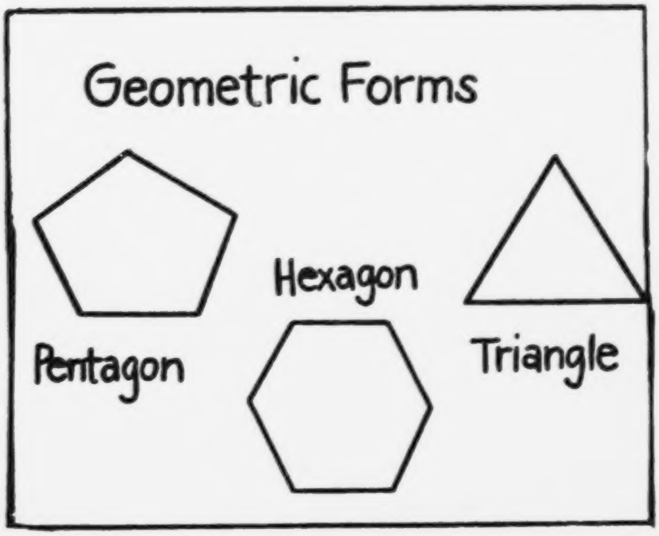

Vaccinate
to
Prevent
Measles

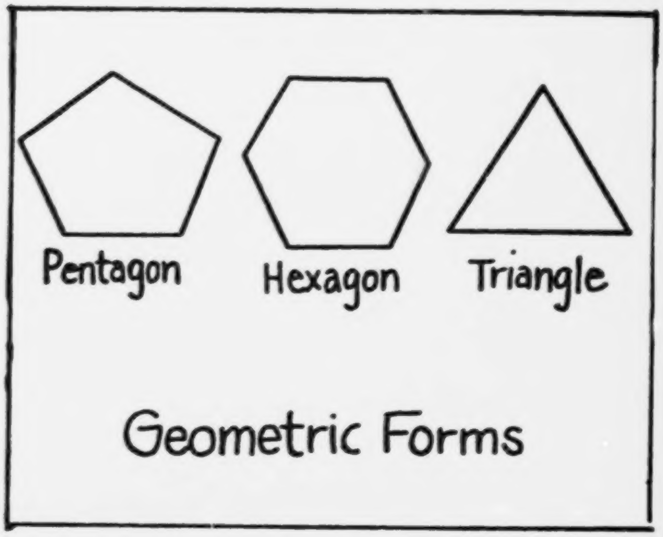

Vaccinate
to
Prevent
Measles

   b) Is there a white margin around the outside of the picture?

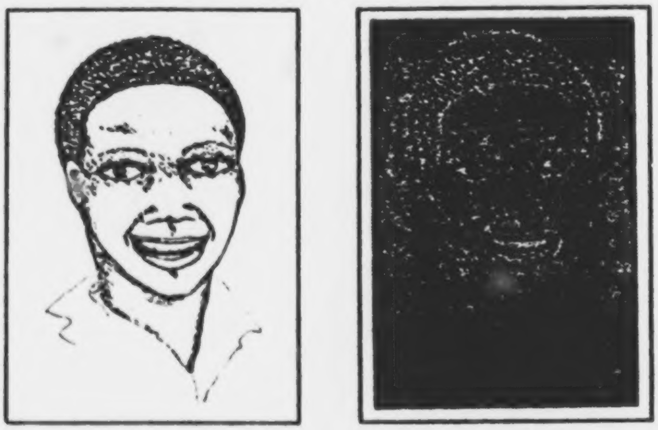


   c) If words are necessary, is it clear what words go with what pictures?

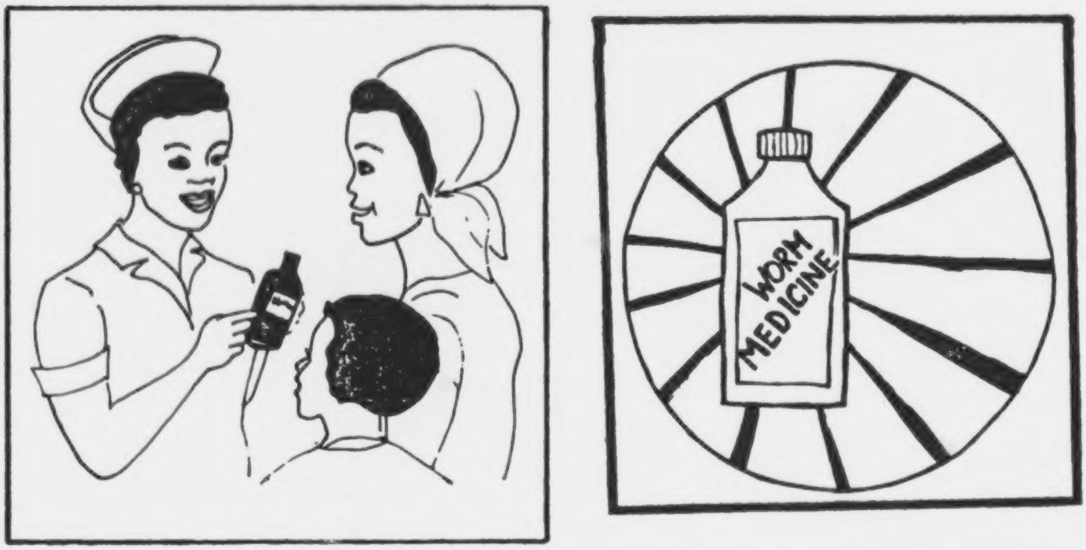

Geometric Forms
Hexagon
Pentagon
Triangle


Pentagon
Hexagon
Triangle
Geometric Forms

5. Does each picture direct the viewer's attention to important information? Examples of ways to do this include:
   a) use of contrast to emphasize important information



   b) making the most important thing the center of attention



6. Is the picture interesting to the people for whom it is intended?

- are the figures and objects in the picture based on the experience of the viewers?
- does the design and style fit local ideas about what is attractive?
- is the topic considered important?

(Based on Wileman."Pretesting and Revising Instructional Materials." pp.26-36.and Teaching and Learning with Visual Aids. pp.85-103.)

USING PICTURES TO COMMUNICATE EFFECTIVELY

DEVELOPMENT OF VISUAL MESSAGES REQUIRES SKILL

- The design and testing of nonverbal materials are more complicated and require much more time than the development of comparable verbal materials. Simple does not mean easy.

KEEP PICTURES SIMPLE

- Keep pictures as simple as possible. It is better to show a family planning clinic set against a plain background than against a city street. A crowded street will only detract from the message being conveyed.

- Though excessive, unnecessary detail interferes with understanding the message, the comprehension may also be reduced by deletion of all detail.

- Each picture and each page should have a single, sharp meaning. Putting multiple messages on one page will be confusing.

- A single page of a booklet should not include too many objects. It is better to have many drawings with one or two objects in them than to try to put many things in one drawing.

- Comprehension of the picture is higher when a person's whole body, rather than just some part of it, is portrayed.

THE MORE REALISTIC, THE BETTER

- For maximum comprehension, pictorial symbols should be as realistic as possible.

- Pictures of objects, people, and actions should look like the objects, people and actions in the specific area where the pictures will be used. Such things as different styles of dress easily lead villagers to assume that a picture does not refer to their own village or their own life.

- Material produced for national distribution may not be equally appropriate for all regions of the country, since there are usually variations in styles and customs from one part of the country to another.

PICTURES WILL BE "READ" LITERALLY

- Remember that villagers will be likely to interpret your drawings very literally. For example, if you draw something larger than it is in real life (such as drawing a fly six inches high) people may assume you really mean it to be an impossibly enormous fly, or they may think it is a strange kind of bird.

COLOR

- If the material being prepared will use more than one color ink, the color choices should be pretested in the same way the illustrations are tested. Keep in mind that certain colors have different meanings in different societies. Choose colors whose meaning in the culture corresponds to the ideas you wish to convey. Using color will also add to the production cost. Tests have shown that color does not, by itself, improve comprehension.

PEOPLE MAY NOT FOLLOW INTENDED SEQUENCE

- People who have not learned to read or write do not necessarily look at pictures in the order intended. It often proves helpful, as messages are being tested, to ask several groups of people to arrange the individual messages into a sequence that seems most logical to them.

- If a poster, wallchart, packet instruction or booklet consists of a series of pictures, numbering the pictures may indicate to the villagers the order in which the pictures should be "read." However, the Honduran tests of the visual instructions for mixing oral rehydration salts showed that this technique does not always work. The placing of the numbers inside the box with the drawings led some mothers to assume that the numbers referred to the number of packets to mix, rather than the sequence of instructions to follow

PICTURES ALONE ARE NOT ENOUGH

- Do not expect villagers to learn a lot from the drawings alone. Use drawings to capture the villagers' attention, to reinforce what you say, and to give them an image to remember, but always give a clear and full oral explanation of your subject in addition to showing the drawings.

- Rural people need to be told explicitly that "pictures will show you how to mix the salts", or to "look at the pictures and follow the directions."

- People helping villagers to understand the message of pictures and posters should explain the meaning of conventional signs and symbols used by the artist. It is likely that if this is consistently done over a period in any given village, the villagers will learn to "read" the messages the pictures are trying to convey. Longitudinal tests in Honduras showed that rural women did not easily forget a symbol once learned.

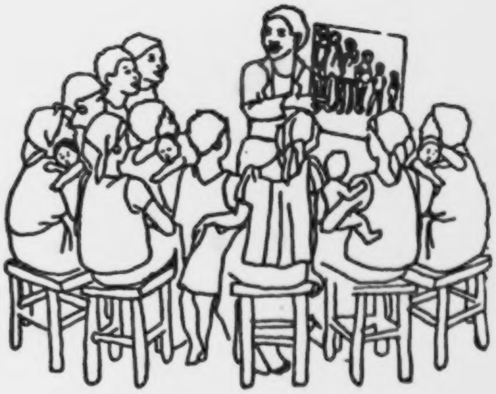
- Not all kinds of technical information can be transferred primarily through illustrations. Pictures can probably be used to teach someone how to change a tractor tire, but it is doubtful they can be used to teach a person to drive that tractor.

THE AUDIENCE DECIDES WHAT PICTURES WORK BEST

- The intended audiences should have the final say about the content, illustrations and sequences that are used. Administrators and others indirectly connected with the project usually will have an abundance of suggestions for revisions, or state that they do not understand the message. But, the materials were not designed for this group!

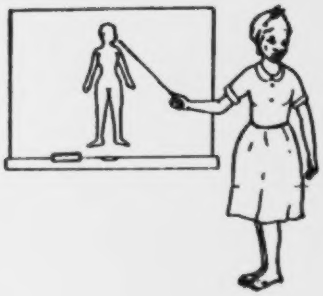
(From: Population Communication Services. "Print Materials for Non-Readers.")

USING VISUAL AIDS

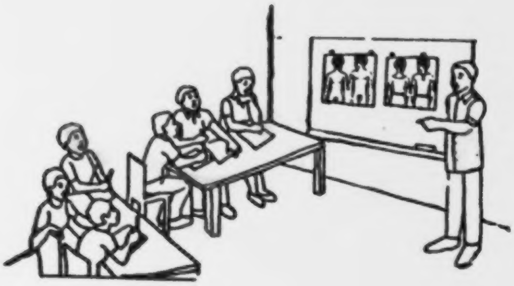


Make sure everyone can see the visual aid.

- is it large enough for the whole group to see?
- are you standing in front of the visual aid?
- is anything blocking the view of anyone?

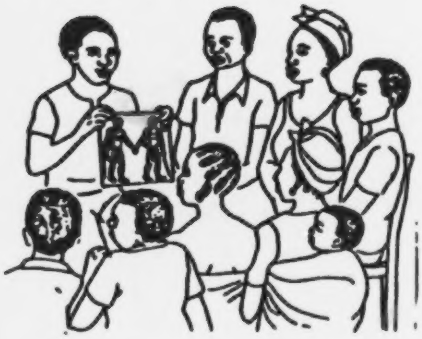


Point to parts of the visual aid as you talk about them.



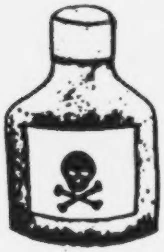
Hold the visual aid still or tape it to the wall. Moving it around can confuse or distract the people looking at it.

USING VISUAL AIDS

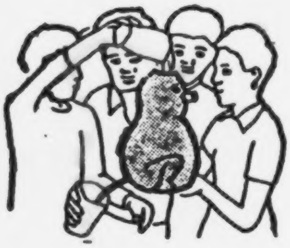


Show the visual aid while you are talking about the topic it illustrates.

- show it long enough for everyone to look at it.
- put it aside when you finish talking about the topic.



Explain any pictures or symbols or words that may be unfamiliar. This is very important with people who are not used to learning from pictures.



Encourage your learners to handle and experiment with your visual aids and to make their own.

- pass them around during discussion.
- put them on display.
- make up activities in which the learners make and use visual aids.

(From: Teaching and Learning With Visual Aids. pp.346-348.)

TITLE: WHY USE VISUAL AIDS?

TIME: 20 minutes

OBJECTIVE: Learners will recognize and state that visual aids are sometimes necessary for a clear understanding of new information.

MATERIALS NEEDED: Pencils and paper for each participant.

Picture of the aardvark (or other animal or object to be described in activity). If you have more than 15-20 participants, you will need a larger drawing. See Unit 2 for ways to enlarge pictures.

INSTRUCTIONS:

1. Be sure everyone has pencil and paper

2. Explain that this activity is like a game that will lead to a discussion of teaching. Explain that you will be asking people to draw an animal based on a description from an encyclopedia which you will read to them 2 times. Emphasize that it doesn't matter how well they draw. Ask them to think about their reactions to the activity as they do it.

3. Read the description slowly and clearly. Do not worry if people express confusion. Ask your learners to draw whatever kind of picture the words suggest to them.

   If learners want to hear the description again, read it to them again.

   Tell them they have 5 minutes to complete the drawing. Let them work on the drawing for 5 minutes.

4. Ask learners how they feel about doing this activity. List some of their responses on the chalkboard to refer to later. Some of the responses you can expect are: "not clear," "not enough information," "I got lost after the first sentence."

5. Ask a few people to guess what kind of animal they have been drawing. Show participants the picture of the aardvark. Reread the description, pointing to each part of the picture as it is described.

6. Ask people to summarize what they have learned from this activity. They should state some version of the objective for this activity. If they have difficulty, give them a hint such as: "What has this shown you about learning new information with words and pictures?"

7. Ask learners to imagine they are nursing students and an instructor has just given them a verbal description of how an IUD is inserted, but has not shown them what the IUD or the inserter looks like! Point to the list of frustrations expressed while they tried to draw the animal. Ask them how they can apply what they have learned in this activity to their own work.

8. Summarize the activity by stating the objective ("You have stated that visual aids . . . ."). Repeat their list of frustrations noting the similarity with frustrations often stated by students.

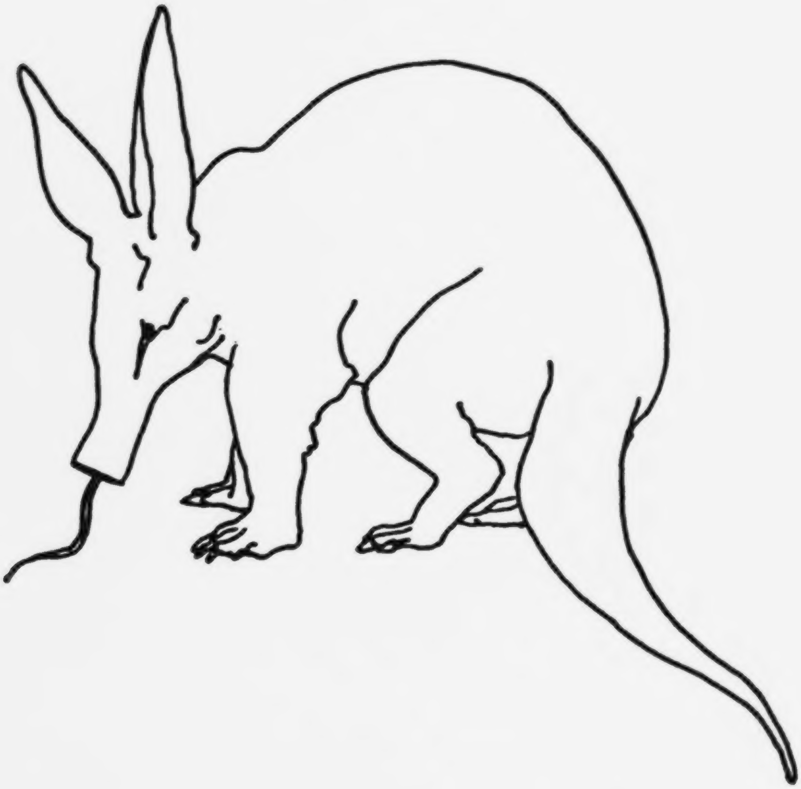
POSSIBLE ADAPTATIONS:

1. The aardvark seems to work well. But you may want to use another example that will be more interesting to your learners. Choose any description of an animal or object that is confusing when described only with words.

2. If time allows, in instruction 5 above, you may want to have learners post their pictures after they guess what animal it is, but before you show the aardvark picture.

3. This activity can be combined with part of activity 3, THINGS WE HAVE LEARNED THROUGH PICTURES). After instruction 7 above, have the large group do steps 1-3 of Activity 3.

"The body is stout, with arched back; the limbs are short and stout, armed with strong, blunt claws; the ears long; the tail thick at the base and tapering gradually. The elongated head is set on a short, thick neck, and at the end of the snout is a disc in which the nostrils open. The mouth is small and tubular, furnished with a very long, thin tongue.



(From: Teaching and Learning with Visual Aids. pp.45-48.)

Tanzania

Villagers teaching us to teach them

Handing the camera over to non-literate village women to photograph familiar village activities yielded interesting discoveries about the way rural people see things, and how they learn.

By JOHN SICELOFF.

The photographer squints through the viewfinder, then motions to the woman holding the baby to dunk it in the bath. The baby shrieks. "Click!"

The scene might evoke familiar memories. But here in this Tanzanian village, there is a difference: the subject is a village woman, and so is the photographer. But even more novel than the scene was the assignment the photographer had undertaken: she was taking pictures of a familiar village activity of her own choosing in order to use the result to teach others how that activity could most easily and economically be performed.

The use of graphic illustrations in communicating ideas about development has been extensively researched. The central purpose of much of this research has been to understand how non-literate rural people respond to visual aids such as drawings, photographs, slide sets, and posters. My goal was similarly to enhance that understanding but to do so in a manner that gave the people themselves virtual control of the material that had to be produced and assessed. So I decided to hand over the tool – the camera – to the villagers so that they could film their own activity. Their choice of perspective, "editing," and the subject "frame" would, I felt, yield significant indications of the way they perceived things visually.

Her own picture series

These pictures were taken by Kabula Njoba, a woman living in Ngeme village, Tanzania. Mrs. Njoba has never been to school, and has seen movies twice. Her subject was: "Farming," and her conception is broad, encompassing not only cultivation but eating and celebration. Each picture has been elaborately planned to show several related activities. Picture No. 5: "They were cooking," shows a woman bringing firewood, another holding a water-jug, another stirring, and another with a pot over the fire.

Over a two-year period in Peru and then Tanzania, two hundred delegated villagers co-operated enthusiastically in the exercise. Each learned how to use an instant picture camera, then took and explained their picture series on how to hoe, to harvest, to cook, to feed the baby, and many other everyday activities. And it became apparent very quickly how invaluable a tool in village education pictures can be. Again and again I saw photographs spark the interest of villagers and provide them with detailed images of both familiar and unfamiliar things and places.

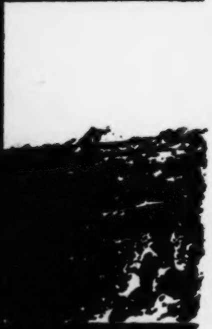
In the process I learnt a great deal about the effective use of picture series amongst villagers, especially women, and as well about why villagers were sometimes left confused about the overall story or message of the pictures and films made by "experts." Particularly confusing have been "how-to" films designed to communicate new skills in essential activities. So putting the camera in the hands of villagers was a move back to the basics, to find out how villagers related to their own productive work on the visual plane.

The picture series taken by the villagers could be roughly grouped into two categories. In the first group, the emphasis was on the action; each step was shown in a separate picture. The photographers in this grouping were mostly men. And they were men who lived in villages near major roads, or in shanty-towns near urban centres.

Pictures taken by women, and by men in more isolated villages, were very different. Their pictures emphasized people doing the

1. "We were farming"

2. "We were washing dishes"


3. "The children

John Siceloff has worked in communications and development in Afghanistan, Peru and Tanzania, and is working on a book on the subject.

work, not each step of how the work was performed. Large blocks of activity were often shown in a single picture.

These photographers conceived of a "how-to" picture series in a very broad sense. They showed people travelling to work, working, resting, and often drinking. The emphasis was on "how *we* work," not a step-by-step presentation of an activity. It was a style of communicating with pictures that was descriptive, personal and "whole," reflecting how villagers taught and learned from one another in their daily lives.

"Why-to" and not just "How-to"

This provided insight into what kind of picture series would be needed to introduce new ideas into village areas. For men in the first grouping, conventional "how-to" pictures, with each step shown in a separate picture, were likely to work. But for nearly all village women, and for men in isolated villages, picture series would need to follow certain guidelines:

– The narration, or written description, that accompanied the pictures would be very important. Pictures in themselves would convey little without highlighting what was seen in the image and why it was important.

– A picture series could not be expected to teach villagers how to perform a specific activity. This could only be done by someone on the spot. "How-to" picture series were unlikely to work.

– Picture series could be very successful in encouraging villagers to adopt new ideas, ranging from improved cropping techniques to better diets for babies. Instead of a "how-to" series, these would be "why-to" pictures.

– A "why-to" picture series would need to be presented in a descriptive, person-to-person, style.

– The picture series would need to present experience, not merely information. This would mean showing something which actually happened in a village and worked.

I struggled with different ways to carry out these guidelines. I found it was difficult to script a picture series that would speak on a person-to-person basis to villagers. The problem was the enormous gap between the actual situation of villagers and my own situation – or indeed that of any highly-trained communications worker living in an urban centre.

Eventually, I found the best way was to involve villagers directly in the planning and production of picture series.

My method was to choose a village where a development idea had been successfully applied, and then to select a group of villagers and ask them to tell with pictures why they had adopted the idea. They planned the story-line and composed the pictures; I shot them. The narration was written jointly and recorded by the villagers. The final product became a testimonial from one village group to other village groups on why they adopted a particular idea, ranging from ox-ploughs to sanitary latrines.

The final step was to create an effective method of using picture series in villages. I settled on a slide series with a recorded narration as a format. I then designed a means of distribution which depended on the villagers themselves. This was an audio-visual kit which can be carried on the back of a bicycle and includes a 12-volt projector and a cassette recorder, both powered by generators fitted to the bicycle. It requires no petrol and no batteries. The advantage of this small kit is that it can be left in the village for weeks at a time. A village worker, paid on a part-time basis, can show the picture and answer questions. Many small showings can be scheduled at times which are convenient for the people in the village.

Reporting on concrete results

As a result of producing these picture series with villagers, I found that I also developed a new attitude toward the role of communication workers in development. I began to see specialists in development communications primarily as journalists, not producers. The first requirement of a successful picture series, I found, was a successful village project on which to base it.

This would mean, for instance, that to educate village women about a balanced diet, the first step would be to find a village where this has actually happened. This might be a village where a co-operative had started to raise chickens and a group of women had planted beans. Should a setback have occurred, such as the treasurer running off with the money, this would also be portrayed in the picture series, along with the remedial action taken. The essential characteristic of the village selected for the series would be that the results of the project were visible. Picture series for villagers are effective only if they are based on actual occurrences, not merely on advocacy or promotion.

What this means is that communications workers must be effective journalists if they are to be effective educators. Before snapping the first picture or drawing the first storyboard, they must be able to see how a project is operating in the field. Only then will they be able to make audio-visual or other aids which present concrete, realistic options likely to motivate villagers to reassess their own practices in favour of more productive alternatives. ☐

studying"

4. "They are singing"

5. "They were cooking"

(From: UNICEF News, Issue 14 Number 4. pp.18-19)

EXAMPLES OF A TEACHING SITUATIONS

CASE 1: ENCOURAGING MOTHERS TO BRING THEIR CHILDREN TO THE CLINIC FOR IMMUNIZATIONS

The health worker in a small rural clinic is concerned because many babies in the area are dying from diseases that could be prevented by immunizations. She is concerned because mothers in the area do not bring their babies to the clinic for these immunizations. Her assistant, who lives in the village, told her that the women fear that the immunizations will poison their babies. They have heard rumors of babies dying after such immunizations and they prefer to use their own herbal remedies for illnesses. The health worker observes that the women gather every week under a tree in the village to pound their grain, talk, and sing. The women are busy with many tasks and only stay under the tree about one hour or less.

What can she do to encourage the women to bring their babies to the clinic for immunizations? She has some paper and paint that she brought from the regional capital. The village has no electricity.

The following are possible answers to the 6 teaching questions for this case study.

1. WHO: women with babies
2. WHAT: bring their babies to the clinic for immunizations
3. WHERE and HOW LONG: under the village tree where women gather to pound their grain; 15 minutes.
4. TEACHING METHODS: songs, stories, or a talk about immunizations for babies
5. VISUAL AIDS:
   a. existing materials: paper and paint, the mothers' children who are sick with a childhood disease
   b. materials she can make:
      (1) pictures to illustrate her songs or stories about immunizations
      (2) drawing of children showing symptoms of each of the diseases that could be prevented by immunizations
6. EFFECTIVENESS:
   a. observe whether the women pay attention to her presentation and ask questions or offer their own stories about diseases or immunizations
   b. count the number of women who bring babies to the clinic for immunizations before and after the session

CASE 2: TEACHING A COMMUNITY HOW TO BUILD A LATRINE

The local health committee has asked the health worker in the regional clinic to visit their community and teach local volunteers how to build a latrine. The village is in a remote area accessible only by foot, donkey, or boat. Most of the villagers have never seen a latrine. The newly appointed health committee heard from a visiting health worker that many of the stomach pains and diarrhea problems in the community could be reduced by building and using latrines. Wood available is locally. The villagers have digging tools. In 1 day a health worker can usually demonstrate how to build a latrine.

What is the best way for the health worker to teach the volunteers how to build a strong effective latrine?

The following are possible answers to the 6 teaching questions for this case study.

1. WHO: village volunteers
2. WHAT: build a latrine in an acceptable location
3. WHERE and HOW LONG: in the community; 1 day demonstration activity.
4. TEACHING METHODS:
   a. lecture/demonstration (lecture about materials needed to build latrines, where to build them, and the steps in building a latrine)
   b. help the villagers build a latrine in an acceptable location
5. VISUAL AIDS:
   a. existing materials: wood, digging and carpentry tools, paper, crayons
   b. materials to make:
      (1) drawings of people building a latrine, showing the different steps in locating and building the latrine
      (2) wooden model of the best type of latrine for this village
6. EFFECTIVENESS:
   a. during construction:
      1. to see how effective your explanation was, count the number and kind of requests villagers make for re-explanation of steps in building a latrine
      2. count the number and kind of mistakes made during the construction
   b. after building the first latrine, return to the village at regular intervals to see if new latrines are being built; also check to see if they are building them correctly and placing them in acceptable locations.

CASE #3: HOW TO INFORM MOTHERS OF YOUNG INFANTS ABOUT NUTRITION

The health worker is in a small clinic in a poor area at the edge of a large urban center. She is concerned about the large number of cases of infant malnutrition that she sees in her community. She talks with some of the mothers. They have little money for food. They feed their babies bread and macaroni with broth from the stews that the adults eat. Most of the mothers cannot read. They are not aware of the dried milk and soybean meal distributed free in a nearby clinic. The mothers who have heard of this free food have not bothered to go to the clinic to get it. They have never prepared such food. They do not know how to cook it. Some think that it is animal food not fit for humans.

The health worker has paper and drawing materials. How can she inform these mothers about nutrition to help them improve the health of their children?

The following are possible answers to the 6 teaching questions for this case study.

1. WHO: mothers in a poor community at the edge of a large urban center

2 WHAT: improve their babies' nutrition through use of dried milk and soybean meal

3. WHERE and HOW LONG: in the community; in the clinic; 15 minute demonstrations.

4. TEACHING METHODS: community displays or exhibits; food preparation and tasting demonstrations at the clinic.

5. VISUAL AIDS:

    a. existing materials: paper and drawing materials, dried milk and soybean meal samples

    b. materials to make:

        (1) a display with drawings to illustrate that a) free food is distributed at the clinic, b) cooking demonstrations are given at the clinic, and c) humans can eat the dried milk and soybean meal cooked in the clinic demonstration.

        (2) a cooking fire, foods made at the clinic demonstrations

6. EFFECTIVENESS:

    a. count the number of mothers who come to the clinic for the food demonstrations

    b. count the number of mothers who come to the clinic for free food

(From: Teaching and Learning With Visual Aids.pp.111-113.)

Session 24

ADAPTING AND PRETESTING HEALTH EDUCATION MATERIALS

TOTAL TIME 4 hours

OVERVIEW

Often the visual aids and other health education materials needed for a particular health education session are not available or those available are not appropriate for the learners. Using the simple tracing techniques practiced in this session, participants can adapt visual aids to fit local needs. Similarly words can be simplified or translated into local language. After identifying or developing health education materials it is important to try them out with people similar to the target group for whom the session is planned. This enables the health educator to make certain that the materials convey the intended message and interest the learners. It also provides another way to learn more about the community. In this session participants adapt a visual aid and pretest it with members of the local community.

OBJECTIVES

- To use tracing and sketching to adapt a visual aid for use in the local community. (Steps 1-3)
- To pretest the adapted visual aid with members of the local community. (Steps 4-6)

RESOURCES

- *Teaching and Learning With Visual Aids*. pp. 191-197 and 223-254.
- Audiovisual/Communication Teaching Aids, Resource Packet (Peace Corps)
- *Bridging the Gap*
- Breast Feeding and Weaning Resource Packet (Peace Corps)
- *Visual Aids on Sanitation for Africa* (Peace Corps)
- *Helping Health Workers Learn*. Chapter 12

Handouts:
- 24A Visual Aids: Do They Help or Hinder?
- 24B Pretest Report Form

Trainer Attachments:
- 24A Tracing Techniques to Adapt Visual Aids
- 24B Role Play on Pretesting Pictures

MATERIALS Newsprint and markers, pictures to adapt, paper for drawing, thin paper for tracing, pencils, paint or crayons, props for the role play.

PROCEDURE

Trainer Note

Prior to the session ask someone to prepare and present tracing and sketching techniques for adapting visual aids using Trainer Attachment 24A (Tracing Techniques for Adapting Visual Aids) and the guidelines for good demonstrations given in Session 22, Handout 22D. If some participants are interested in drawing, try to organize peer teaching by one of the participants with drawing skills, using Helping Health Workers Learn, Chapter 12 (Learning to Make and Use Pictures). Also identify pictures that participants can adapt in this session. Breastfeeding and Weaning (Resource Packet P 12) or Visual Aids on Sanitation for Africa include many pictures that could be used in this activity and are available through ICE.

Ask two or three people to prepare to do a 10-minute pretesting role play. Work with them as they practice the interview techniques described in Handout 24A (Visual Aids: Do They Help or Hinder?) and develop the roles in Trainer Attachment 24B (Role Play on Pretesting Pictures), to make certain that the role play will demonstrate effective interviewing.

Invite several people from the local community (or local people who work in the training center) to visit the session for 30 minutes (during step 4) to give their opinions about some visual aids. Also try to arrange for separate rooms to conduct the pretest interviews, so that the groups do not distract each other.

Step 1
(35 min)

Demonstration on Using Tracing to Adapt Visual Aids

Ask the pre-selected person to demonstrate how to use tracing to adapt visual aids. The demonstrator should assign the group a tracing exercise like those in Trainer Attachment 24A (Tracing Techniques for Adapting Visual Aids) so that participants have a chance to practice this technique after observing it. The trainer and the demonstrator should move around the group and help anyone having difficulty.

Trainer Note

An effective way to introduce the tracing demonstration is to show the group a picture that you traced and claim that you drew the picture in five minutes. When they ask how you became such a great artist you explain that you "cheated" that is you traced the picture from a photograph and modified it slightly.

When demonstrating tracing it is important to note that you have to decide how much detail to copy from the original picture as is explained in Trainer Attachment 24A (Tracing Techniques for Adapting Visual Aids). Also urge trainees to clip or tape the tracing paper to the picture that they are copying so that the paper does not shift during the drawing.

People usually vary a great deal in how quickly they trace and sketch. Have additional exercises for those who finish early. For example they can try out other drawing techniques shown in Helping Health Workers Learn, Chapter 12.

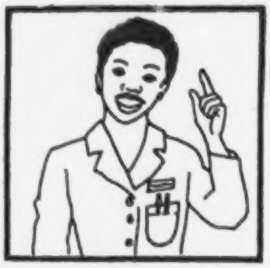
Step 2
(15 min)

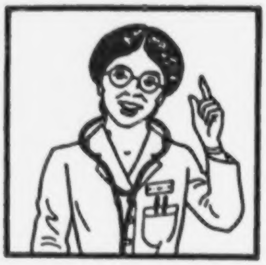
Discussion on When to Adapt Visual Aids

Distribute copies of the visual aids that you have selected for participants to adapt. Ask each person to adapt the visual aid for a specific group of learners and a specific health education objective. Refer back to the discussion of cultural considerations for selection in Session 23 (Selecting and Using Visual Aids), and discuss some of the kinds of things that they might want to adapt (for example, to make a breastfeeding poster from the USA look more like the local setting). Suggest that participants refer to Handout 23D (Using Pictures to Communicate Effectively) for additional ideas about what to adapt. Explain that they will be trying out this visual aid with some people from the local community to see how well it communicates.

Trainer Note

If possible show some examples of pictures that have been adapted and describe why and how they were adapted. The example below was taken from a counseling book developed for use in the United States and adapted for use in West Africa by changing the facial features and clothing





Some of the points that should come out of the discussion include:

- changing clothing, hairstyle, facial features, gestures to resemble local people
- changing objects, houses, scenery to look like the local area
- changing or omitting words and symbols that are unfamiliar
- avoiding colors that have negative or religious meaning or are unrealistic.
- simplifying pictures that are too technical or show too much information at one time.

Step 3
(60 min)

Practice Adapting Visual Aids

Advise participants to begin by roughly sketching or making notes on the changes that they want to make in the visual aid before they begin tracing and sketching the final version. Give them time to work on the assignment. Move around the room and assist anyone who is having difficulty.

Step 4
(25 min)

Pretesting Role Play

Ask the three participants to present the pretesting role play that they prepared before the session. Ask participants to watch carefully how the role players conduct the pretest so that they will be able to pretest their own visual aids later in the session. After the completion of the role play, lead a discussion on how to pretest materials. Ask participants to develop a list of steps to follow. Ask someone to write the steps on newsprint and suggest that everyone copy the list for use later in the session.

Trainer Note

If possible, do the demonstration of pretesting with community members rather than roleplaying it with the group. Describe some actual cases of pretesting and its results such as the examples described in Handout 24A (Visual Aids: Do They Help or Hinder?). Ask participants to recall the techniques they practiced in Session 11 (Methods for Learning About the Community).

You can use your reading of Handout 24A (Visual Aids:.Do They Help or Hinder?) as a guide for the discussion. Some of the important points that should appear on the list include:

- Greet the person or persons appropriately.
- Introduce yourself and explain that you are trying out new materials.
- Make the person feel at ease in your company, ask about the family, ask about village matters, crops,or the weather, etc.
- Ask open questions about the picture, such as "what is happening in this picture?" "Is there anything that you do not like about this picture?"
- Encourage people to talk. Assure them that this is not a test. There is no right answer. You want to know what they think about the picture.
- Let people touch the materials if they want to.
- Ask probing questions if you get vague answers to your questions, or phrase the question in a different way.
- Work in pairs if possible so that one person can accurately record the responses while the other holds the conversation with the community member.
- Explain that you are recording because you think their opinion is important to improve the picture and you don't want to forget what they have said.
- Stop recording if the person objects or seems to be nervous about it.
- Thank the person for his or her help (or the group in a focused group interview).

Step 5
(45 min)

Pretesting Materials with Community Members

Distribute Handout 24B (Pretest Report Form) and give participants a chance to look at it, ask questions, and modify the questions. Divide the participants into four groups that will work together in pretesting. Give the groups five minutes to select one or two of the visual aid adaptations to use in this activity. Explain that they will be reporting the results of the pretest to the other groups.

When doing the pretest, one member of the small group should serve as interviewer and another as recorder, while the others observe. Have the groups pretest the adaptation first, then the original visual aid. Each group should try out these materials with at least two visitors.

Trainer Note

If time allows, arrange to have the participants pretest the visual aid in the community. Ask each group to pretest their poster with two different people similar to those for whom it is intended.

If the pretesting takes place in the training center, arrange separate rooms for each of the groups to conduct their interviews or have them work in different corners of the room so that they do not distract each other.

Spend some time with each of the groups but do not interfere with the interview. Note some good interviewing techniques and interesting outcomes that you can mention during the discussion of the pretests.

After participants have worked with one community visitor for 15 minutes, have them rotate and spend the last 15 minutes interviewing different second visitor.

Step 6
(40 min)

Discussion of Pretesting Experience

Ask each group to give a brief report on what they learned from the pretesting interview. Lead a large group discussion of questions such as the following:

- What did you learn about how well the visual aids communicated the intended message?
- What did you learn about how interesting the visual aid were to the community members?
- How did your ideas about what needed to be adapted in the original poster compare with those of community members?
- What else did you learn about the community through conducting the pretest?
- What did you find that was important that you didn't expect from pretesting the poster?
- What other kinds of media, messages and techniques could be pretested in a similar way?

Trainer Note

If some participants are involved in radio health education, they may prefer to try out spot announcements instead of a picture. Others may want to try out a song or a puppet show.

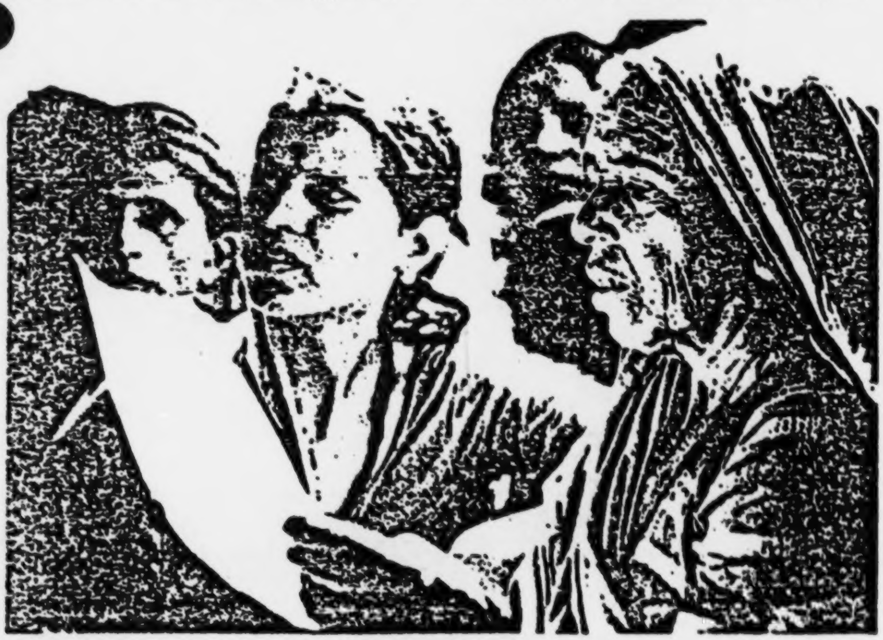
Encourage participants to make the proposed changes in their visual aids. If possible allow time for this and arrange a place on the wall for a gallery of visual aid adaptations.

Visual Aids: Do They Help or Hinder ?

In India, not too long ago, an artist created a beautifully colored set of drawings to encourage women in the local dairy associations to make silage. When the materials were later used with a group of village women, this audience looked at a drawing showing the size of a silage pit. The women were asked, "How many cartloads of green fodder will fill this pit?" Following much discussion, they replied, "Thirty." Then the women were asked if they, or anyone they had heard of, had collected or could collect 30 cartloads of green fodder for silage. They laughed and said, "Of course not!" This set of visuals was not effective because the technology it encouraged was not appropriate to the environment where it was being promoted.

Many things prevent educational materials from being appropriate. Perhaps the people who develop the materials are not working at the community level. Or maybe they are not working closely with others who are working there. They may not be familiar with the way their intended audience lives, thinks and speaks. Therefore, these developers do not know how to prepare the materials so that they will be understood by the people they are trying to reach.

They may produce drawings or photographs showing urban people, even though the target audience is made up of rural people. The language used with the visual may be too sophisticated or too technical for the audience to understand.



What does this woman see in the picture she is studying? Does she see what we intended that she see? When we field test our materials with people from our target audience, we can help to insure that the visuals we produce are appropriate.

It is important that we find out if a visual aid does what its name suggests: aids the audience in learning. Or does it actually hinder learning? For example, in the situation with the visuals for silage, not only was the idea inappropriate, but the visuals confused the audience. In one drawing, the person shown was as tall as the silage pit was wide. But in a drawing of the same silage pit a few pictures later, this person was like a small child in comparison to the size of the silage pit.

Another example of confusion and mistaken meaning comes from Southeast Asia. A poster set about oral hygiene showed only women and children. Therefore, some of the audience concluded that men do not get cavities!

Testing Is A Necessary Step

How can we insure that our visual materials will be effective? No matter how sensitive we are to the needs of our audience, or how our audience sees and hears things, we can still make mistakes. That is why testing and evaluation of educational materials is so important.

The examples above show us that preparing effective visuals is not an easy task. The audience may not have the experience to relate to the ideas presented in a visual. If the people who created it are not well acquainted with their viewers, a visual may not be prepared so that the audience can understand it. Some visuals may suggest to a particular audience something far different from what the developers had in mind. Or visual materials simply may leave the viewers confused!

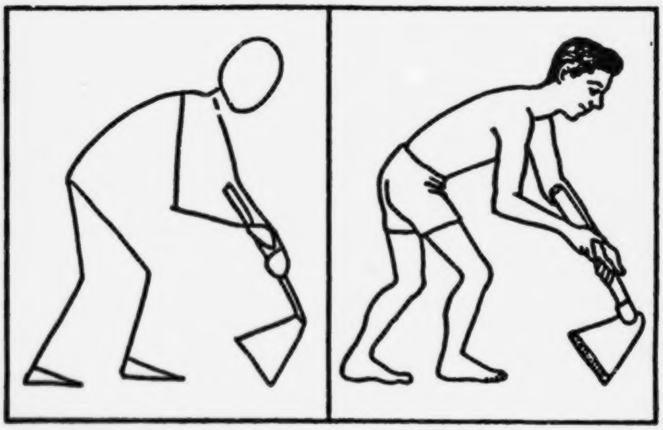
This issue of World Neighbors In Action tells us how we can use simple techniques which will help us to test either materials we have made or materials made by others. Only by learning how to test our materials and making revisions in them will we be sure that the materials we develop are really appropriate.

How Do We Prepare For Testing?

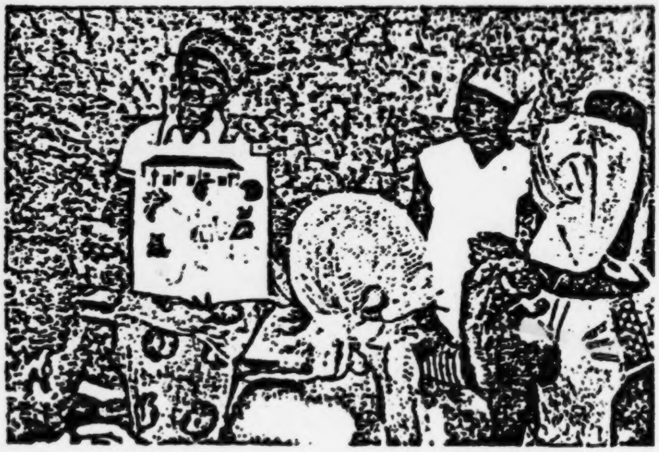
It is important to decide exactly what it is that we want to test before we begin the testing procedure. The materials we test should resemble as closely as possible what we expect the final product to look like. If the finished visual is going to be a series of detailed drawings, we do not want to do our field test using stick figures. If the visuals are going to be in color, it is probably not advisable to have our test visuals in black and white.

Because we may be using some of the same pictures in the final version of the visual, they should be protected during the testing. If photographs can be reprinted, we do not need to take too many precautions to protect them. However, it is wise to cover our drawings with plastic sheeting. This covering will protect the drawings, but they will still be highly visible.

It is often best to test different things at different times. If we are only testing the appropriateness of an idea, simple drawings may be best. If we know that the idea is appropriate, we may need to use finished art and only test for sequence or language.



How Do We Choose Our Testing Audience?



Too frequently, our testing is done with the wrong audience. It is not enough to test ideas or materials with a group of associates. Our colleagues may have some useful ideas, but they will not and cannot be looking at the materials through the same eyes and with the same thoughts as a villager. If the target audience of the finished visual is to be women, we must not test the materials with groups of men.

We must always bear in mind that the people in our testing audiences are doing us a favor. Their time is valuable, so we should arrange for a testing time which will fit their schedule. They should have enough time to look closely at the materials. We must also allow ample time for our audience to respond.

We must be sure that our viewers know how important their opinions are to the testers. It is often helpful to tell them: "These materials which we are testing with you may be useful to other audiences. We need your help in making that decision. If you do not tell us what you really think, we may produce materials that will be of no use at all. This wastes not only time, but also money."

What Things Are We Testing For?

There are many different things which determine how the people in an audience respond to visual aids and what they understand from these materials. Before testing, it is helpful to make a list of all the things that we should look for. We may not be testing all of these things during the same presentation, but each one should be tested for at some time. You may wish to make additions to the suggested questions which follow.

1. Can the audience understand the pictures?
2. Can the audience understand the language?
3. Is the subject matter socially acceptable?
4. Is the size of the visual aid appropriate?
5. If analogies are used, do they work well?
6. Is the presentation so long that it is boring?

Three Methods of Testing

Of the many different ways to test materials, we have found that three methods are most useful. We must always be prepared to ask the audience questions, and we should have some way to record their answers. It is good to have present a person besides the tester who takes notes of what the audience says.

It will be helpful to try each of the three methods described below. One method may be more useful than another with different materials or different audiences. Sometimes the best way of testing is to combine the different methods. It is a good idea, perhaps even necessary, to test the methods of testing.

METHOD ONE

Whether the visuals we are testing are projected or non-projected, a good way to test what the audience actually sees is to show them only one picture at a time. While each picture is being shown, we ask the audience, "What do you see?"

We must avoid making remarks which "lead" or influence the audience to see something we want them to see. After all, we want to find out what they see in a particular picture, not what we see. We must not make comments like "That's right" or "That's wrong." Instead, we can thank each person for the idea, then repeat it and ask someone else for an opinion. After all the people who wish to express their ideas have done so, the purpose of this method of testing will be accomplished.

Using this method, we do not say any of the dialogue which would normally accompany the picture. Our purpose in this kind of test is to see if the visuals alone are understood.

METHOD TWO

The second method of testing is to use the pictures and the story together. At the conclusion of presenting the story and the pictures, we ask the audience a series of questions, and we record their responses on paper.

The questions should be "open-ended." This kind of question asks people to tell what they think about the material, and does not hint at what the answer might be. The audience should be able to answer these questions without saying only "yes" or "no." Some of the questions we might ask are:

1. What is the story about?
2. What did you learn from the story?
3. Which pictures helped you to understand the story? Why were they helpful?
4. How would you change the pictures to make the story easier to understand?

METHOD THREE

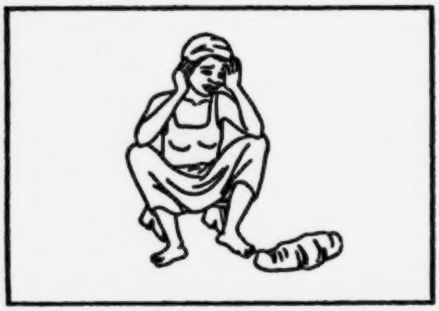
One of the most interesting ways to test our visual materials is to ask a small group of audience members to thoroughly examine and discuss some pictures. After discussion of the drawings, the group makes up and tells a story using these pictures. The tester is simply an observer.

Not only does this method of testing show us how the audience tells stories, but it gives us the actual words they will use. After the group members have told us their story, we should ask them if there are additional pictures which would be useful in better telling the story. These suggestions from the testing audience can be valuable when we later revise the material. They can help us to identify the "missing links" which, if omitted, can prevent the target audience from understanding the message of the visual. Very often we find that educational visuals developed in this way are some of our most useful materials.

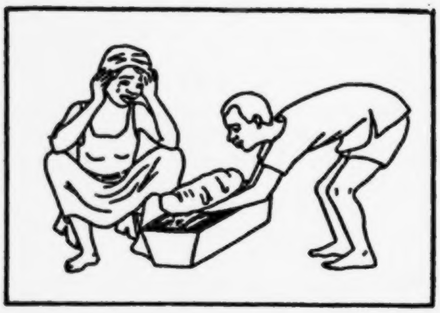
Completed Visuals Reflect Results of Testing

If we have done a good job of testing our materials, there will be revisions to make. Sometimes the changes are simple, and sometimes they are complicated. As we gain experience in developing visual aids, we will do a better job of preparing both the original visuals and script. This usually means that testing will show fewer changes have to be made when we produce the completed visual. Let's look at examples from materials developed in programs with which World Neighbors works.

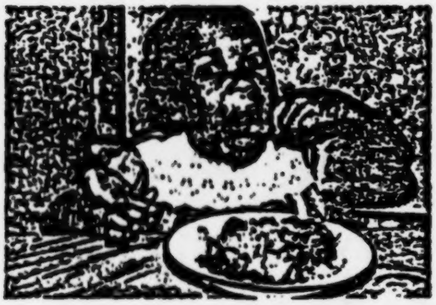
Understandable Pictures



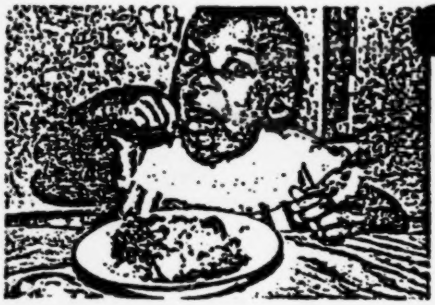
These two drawings are from a flipchart series developed in West Africa. The series is used to help upgrade the skills of traditional birth attendants. At left is the first drawing of a mother with her dead child. It was used to introduce the idea of women who are at risk of losing their next child. But the audience thought the child wrapped in a shroud was a yam! On the right we see the revision. When the shrouded baby was being placed in a coffin, the audience understood.



Socially Acceptable Visuals

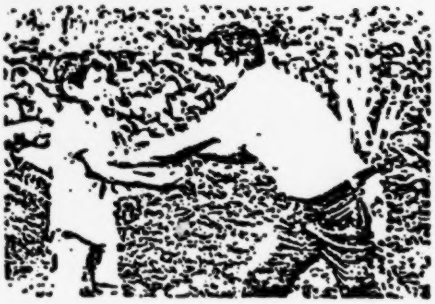


In these two photographs, we see a revision which was made because of a social or cultural problem. Note that the little girl is using her left hand to eat her food in the picture on the left. In many areas of the world, eating with the left hand is socially unacceptable because the left hand is associated with latrine practices. For this reason, it was necessary to change the photograph to the way it appears on the right. In this photo, we see the girl eating with her right hand.



Accurate Transfer of Message

Sometimes a photograph or drawing does not convey the intended message to the target audience. To illustrate the advice that a farmer should spray with pesticides only when he feels well, the photograph of the sick man on the left was used. During field testing in Honduras, the audience of farmers agreed that this precaution was better pictured by a farmer who felt well enough to play with his son. As a result of field testing, the photograph at right was used in the completed visual.



(From: World Neighbors. World Education In Action Newsletter)

Session 24, Handout 24B

PRETEST REPORT FORM

Project Description

Type of Material Tested________________________________

Health Message________________________________

Objective ________________________________

Intended for Whom________________________________

Who was interviewed? (categories should be adapted for intended audience)

Person #	Age	Sex	Education	Ethnic Group
One				
Two				
Three				
Four				

Responses to Questions

What is Happening in this picture?	What did you learn from hearing hear- in the story?	How could we improve the the picture	How could we improve the story
Picture #1			
Picture #2			
Picture #3			

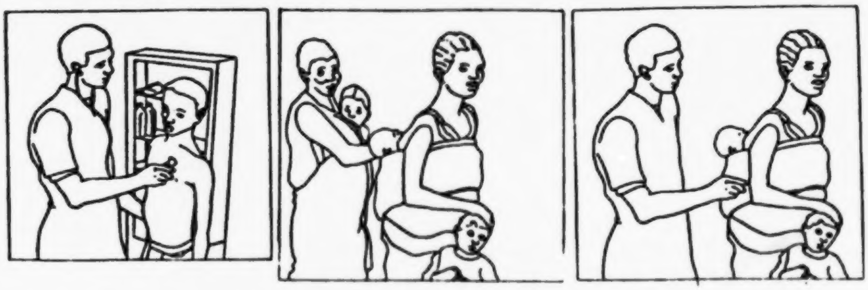
(Adapted from Ane Haaland, Pretesting Communication Materials UNICEF, Rangoon Burma 1984, p. 31)

TRACING TECHNIQUES TO ADAPT VISUAL AIDS

Many health care trainers know that visual aids can make new information easier to understand. Unfortunately, visual aids which fit the needs of your learners are not always available.

You can use tracing techniques to make visual aids which do not require many materials or any special skills in drawing. Magazines, books, posters, and many other materials contain photographs and drawings which can be used to make visual aids for health training and public health education.

For example, a health worker in a rural clinic may need a poster on child spacing that shows a family with two or three children who are obviously happy and healthy. The only available and suitable pictures show only larger groups of people. By using tracing techniques, the health worker can make the needed poster by combining tracings of individuals from different pictures to create a family group, as shown below.



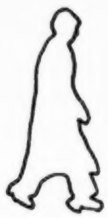
There are two activities on tracing: one to practice simple tracing and one to practice transferring a picture using carbon. The skills taught in these two activities will be necessary to do other activities in this unit, so we recommend that you do both of them.
You may want to demonstrate all of the skills before beginning the activities. The skills which need to be demonstrated are:

1. Simple tracing
2. Tracing using a light source
3. Making your own carbon paper
4. Transferring a picture to another piece of paper using the carbon transfer technique
5. Outlining the figures in black and coloring them in, using available coloring materials.

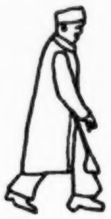
See Unit 5, Demonstrations, for tips on giving a good demonstration.

Share the following information with your participants before beginning the activities.

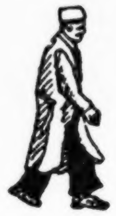
Before using one of the tracing or transfer techniques that you will learn, decide which pictures to trace and how much detail to copy from those pictures to communicate your message. The amount of detail can range from only an outline of the shape of the picture to a very detailed drawing.



shape only

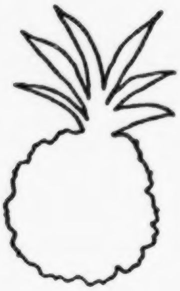


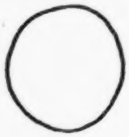
simple drawing



detailed drawing

The basic shape of an object can communicate what it is if the object has a distinctive shape and if the group you are teaching is familiar with the object. For example, the round shape of an orange also looks like a ball. More detail is needed for people to be able to tell it is an orange. The basic outline shape of a pineapple can communicate the idea of a pineapple, if the group is familiar with pineapples.





More detail provides more information about the real object or person the tracing represents. Too much detail can be distracting. The person looking at the picture may pay more attention to the background or details of costumes than to the central subject.

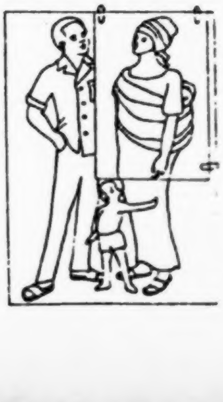
It is important to try out your drawings with the people for whom the drawing is intended. You should choose shapes, simple drawings, or detailed drawings carefully based on the idea you want to show and the group of people you want to teach.

EVALUATION:

After each activity, ask your learners to:

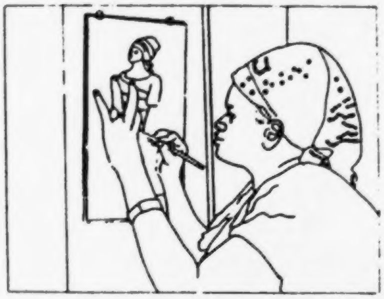
1. Compare their traced drawing with the original picture. Did they trace enough of the person or objects to communicate what it is? Did they copy too many details so that the drawing is cluttered and confusing or possibly distracting?
2. Show the drawing to a few people from the group with which they plan to use it or to people with similar background and interests. Ask them what they see. If these people are confused in any way by the picture, ask them why. Make changes in the picture until it does communicate your message.

TITLE: SIMPLE TRACING TECHNIQUE

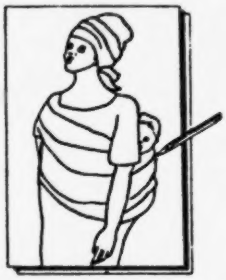


1. Choose a picture from a magazine, poster, or some other source, or use the enlarged drawing of the picture below included at the end of this activity.
2. Place a piece of thin paper (paper you can see through) over the picture. Use paper clips or pins to hold the 2 pieces together. Do not use tape because it may damage the original picture.

3. If you cannot see the picture through the paper, hold both pieces against a light source such as a window or on an overhead projector.



4. Using a pencil, carefully trace the parts of the picture you wish to use. Use only as much detail as you think is needed. In the example, you may wish to copy only the part of the picture that shows the woman and baby.



5. You can finish the drawing on the thin paper by covering your pencil lines with ink, paint, crayon, or colored marking pens. Erase any pencil marks not covered by color or ink. The figures will show up better if you outline them with black and then color inside the black lines.

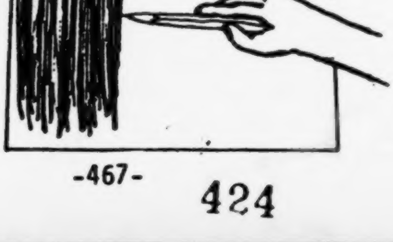
TITLE: CARBON TRANSFER TECHNIQUE

To use the tracing technique explained in Activity 1, you need to use thin white paper so that the picture will show through the paper. The thin paper will not last a very long time, so you may want to transfer your tracing to a thicker piece of paper, such as drawing paper. This activity explains how to transfer your tracing from one piece of paper to another.

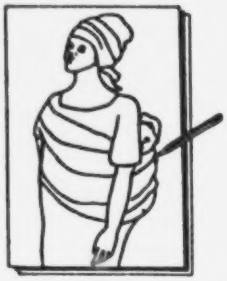
1. Trace any picture on thin, white paper. You can use the tracing you made for Activity 1.

2. Use a piece of carbon paper or make your own, like this:

   Cover the back of your tracing with pencil lead by using the side of a soft-lead pencil. You can use a piece of charcoal from your kitchen fire, if pencils are scarce. You could also rub the pencil lead onto a separate piece of paper and use it like you would use carbon paper.



3. Place the paper with carbon (bought or made) on top of a sheet of drawing paper. The carbon side should be touching the drawing paper.
4. If you are using a separate piece of carbon paper, place your tracing on top of the carbon paper.
5. Fasten the 2 or 3 pieces of paper together with paper clips or pins.
6. Trace over the lines of the drawing using a soft-lead pencil with a fairly sharp point. As you trace the lines, the pressure of the pencil will transfer the picture onto the drawing paper.
7. You can complete your drawing by using pen and ink, crayons, paint, or colored markers to color the visual aid. Remember to outline the lines in black and then to color inside the lines.
8. Erase any carbon or pencil line that is not covered.



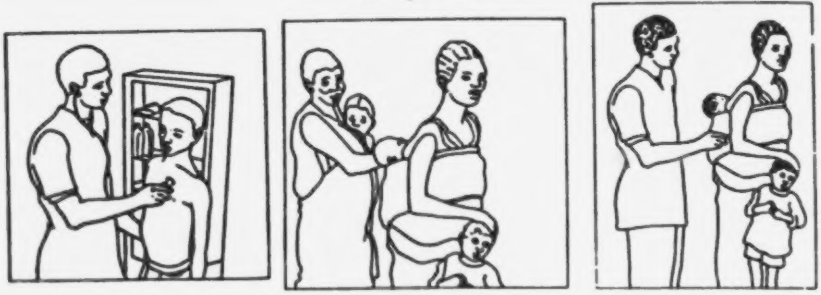
SKETCHING AND TRACING SKILLS

Sometimes the techniques introduced in the TRACING activities are not enough. Your learners may have found the pictures they need but they need to put them together in a new way. They may need to change or adapt figures. For example, they may have found a good photograph of a woman, but she is dressed in city clothing and they need a picture of a woman dressed in rural clothing. They may have found a drawing of a happy, smiling child, but they need a picture of a crying child.

These SKETCHING AND TRACING activities show your learners how to make simple changes in pictures so that they can adapt them to their needs. Learners will practice combining tracing skills with some new sketching skills. They will be able to make greater use of the pictures they find if they can adapt them to fit the specific needs.

In this example, the tracing techniques have been used to draw the basic shapes and lines of the people. Small changes have been made to adapt the photograph for use as the poster. These changes were made by sketching. A sketch is a rough drawing that represents the main features of an object, a person, or a scene. By completing these activities, you will be able to combine your skill in tracing with a new skill in sketching to adapt pictures for visual aids.

Drawing 1.



MATERIALS NEEDED FOR ALL ACTIVITIES:

Thin, white paper

Pencil

Eraser

Ruler or straight edge

Tape

Pictures trainer and learners need are listed for each activity

TITLE: ADAPTING CLOTHING

1. Use the "Space Your Family" poster (drawing 1).

2. Trace the poster on thin, white paper, using one of the tracing techniques. (Do not forget to trace the lines that mark the edge or "space" for the poster. A ruler or a straight edge will be helpful.)

3. Make the changes listed below by sketching. To sketch, lightly draw in new lines for the needed changes and erase lines you no longer need. You will probably not make a perfect drawing the first time you try. Just keep sketching and erasing until the changes are made. Remember, as with most skills, practice makes perfect.

   Changes to make in the woman:

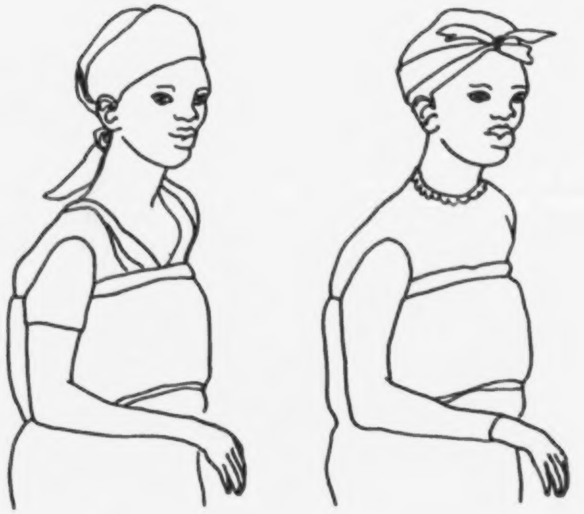
   a. Add a scarf to the woman's head. Think about how a scarf looks. Lightly sketch the lines of the scarf on the woman's head. Erase and draw again until it looks like a scarf. Erase the woman's hair that cannot be seen under the scarf.

   b. Change the woman's dress so that it covers her shoulders. Again, lightly sketch the new lines to your tracing to extend the woman's dress over her shoulders.

4. Show your drawing to a friend and ask for suggestions for improving it. Try to make the changes by your friend's suggestions.

There is no one right drawing. You may have added short sleeves or long sleeves. The neckline of the dress may be a round opening or it may have a collar. The scarf may be tied at the neck or on top of the head. It may cover all of the woman's hair or it may leave some hair showing. Here are some examples of how your drawing may look.

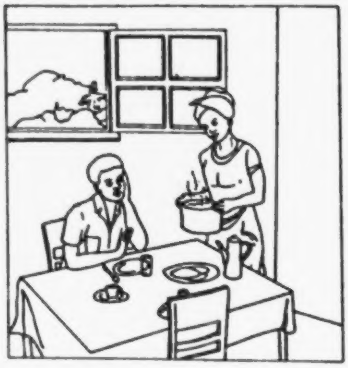
Drawing 2



TITLE: ADAPTING OBJECTS AND HUMAN POSITIONS

1. Use the picture of the family at mealtime. (drawing 3).

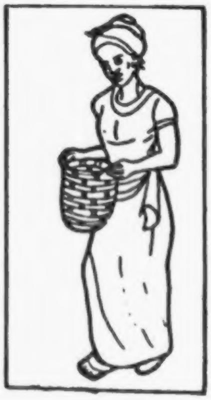
Drawing 3



2. Trace as much of the woman as is possible.
3. Change the pot or dish she is holding to a woven basket. The basket can be of any size or shape you want to make it as long as it still fits into the woman's hands. You can use the lines of the pot or dish to begin the shape of the basket. Add lines to make the basket look like it is made of woven grass.
4. Continue the lines of the woman's dress so that it reaches to her feet.
5. Your drawing now shows a woman who is standing and holding a basket.
6. Change the drawing so that the woman is taking a step forward.
7. Ask someone to take a step forward and to hold the position. Look for the answers to these questions:
    a. How would her dress look if she is taking a step forward instead of standing still? If she is stepping forward, the leg in front will have a bended knee.
    b. How much of the woman's feet will show below the dress?
    c. What position will her feet be in if she is taking a step forward? The foot that is stepping forward will be flat on the ground. The heel of the other foot will be slightly off the ground.
8. Lightly sketch new lines onto your tracing to show the woman taking a step. Erase and resketch until you have made the necessary changes. Erase the lines you no longer need.
9. Show your drawing to a friend and ask for suggestions for improving it.

   There is no one way to make these changes in the drawing. Here is one possible adaptation. Notice how the shape of the dress is changed to show where the bended knee would be. Notice also the position of the feet.

Drawing 4

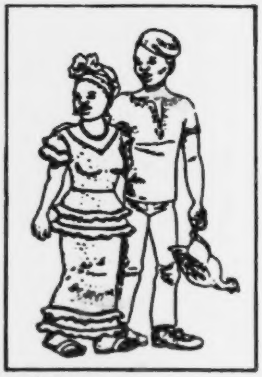


TITLE: ADAPTING FACIAL EXPRESSIONS AND FEATURES

INSTRUCTIONS:

1. Use the picture of the couple in drawing 5.

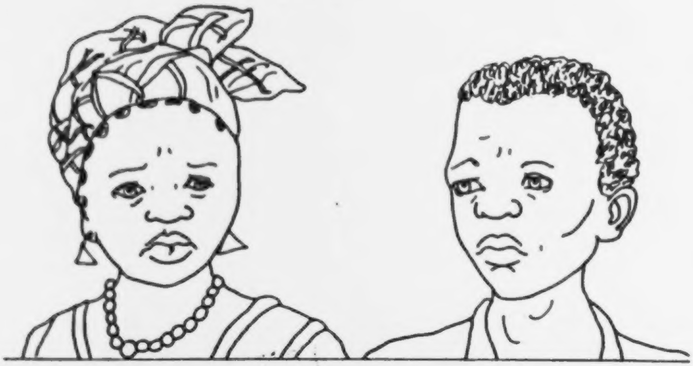
Drawing 5



2. Trace the man and woman.
3. Change the expressions on their faces so that they look worried or unhappy.
4. Ask someone to make a worried or unhappy face. Look for the answers to these questions:
    - a. What parts of people's faces move when they change their expressions?
    - b. How do people's mouths look when they are worried or unhappy? Are their lips open or closed? Do the corners of their mouths point up, down, or not move?
    - c. How do people's eyes look when they are worried or unhappy? Are they wide open? Slightly closed?
    - d. How do people's eyebrows look? How does the shape of the eyebrows change when someone is worried or unhappy?
    - e. How do people's foreheads change when they are worried or unhappy?
5. Begin making changes on the pictures. Start with one part of the face. Use the lines which are already in your tracing. For example, start with the eyebrows. Lightly sketch new lines for the eyebrows to show worry or unhappiness. Erase unnecessary lines. Go on to another part of the face and continue the changes.

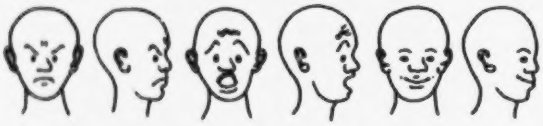
Your new expressions will look something like this:

Drawing 6



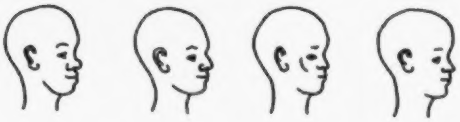
6. Can you identify the 3 facial expressions in drawing 7? Notice the differences in the eyebrows, eyes, and mouths.

Drawing 7



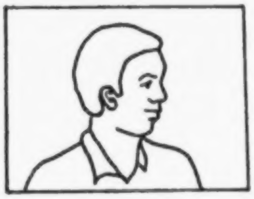
7. Facial features can also be adapted so that the people look more like the ones in your area. You will need to pay special attention to the shapes of the forehead, noses, and lips. Look at the examples in drawing 8. Which facial features look most like the people in your area?

Drawing 8



8. Change the facial features of the man in drawing 9 to another type.

Drawing 9

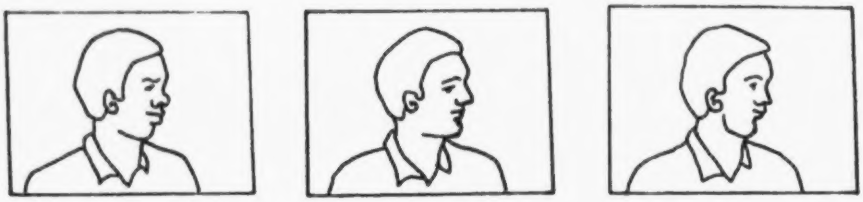


9. Trace the man's face onto a piece of paper.

10. Change his facial features to one of the other types of facial features shown in drawing 8. To do this, you will need to change the shape and length of his forehead and the shape of his nose and mouth.

Your new drawing will look something like one of these

Drawing 10

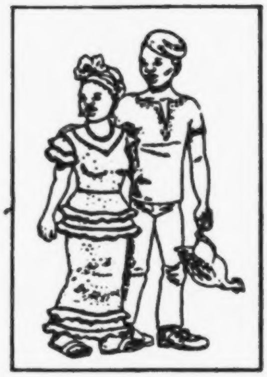


TITLE: MAKING A COMPLETE VISUAL AID THROUGH ADAPTATIONS

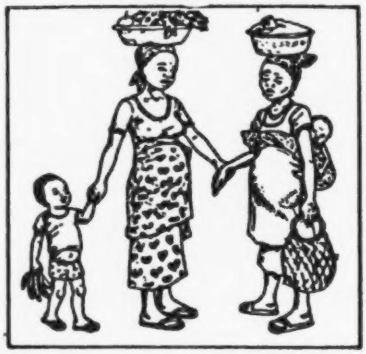
1. Use the full-body tracings you have already made of drawing 5 (the man and woman).

2. Add the little boy in Drawing 11 to the tracing of Drawing 5 so that the child is holding his father's hand.

Drawing 5



Drawing 11



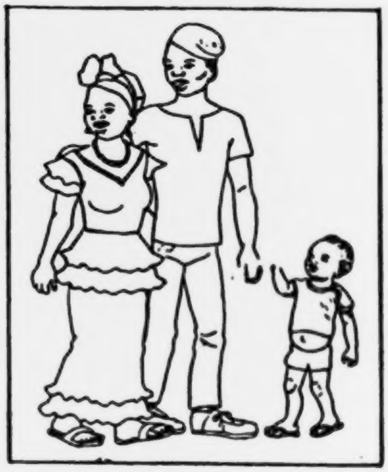
To do this, you must change the direction in which the little boy is facing and change the position of his arm so that his hand will reach his father's. (You could change the father's arm instead of the boy's but that would be more difficult.)

3. Step one: Change the little boy so that he is facing his father.

   a. Trace the drawing of the little boy onto a separate sheet of thin white paper.
   b. Turn the tracing over so that the clean side of the paper is facing you.
   c. Use either the carbon transfer technique or a window as a light source to make another tracing of the little boy onto another sheet of paper. (See TRACING for how to do the carbon transfer technique and how to use a window as a light source for tracing).

You should now have a tracing of the little boy facing in the direction of his father.

Drawing 12



4. Step two: Add the little boy to the drawing of the mother and father.

   a. Put the paper on which you have traced the little boy under the paper which has the tracing of the mother and the father.

   b. Move the tracing of the little boy around until he is in the correct position to hold his father's hand. Be sure that he is not stepping on his father's foot! The little boy's feet should be at the same level as his father's.

   c. Tape the corners of the two pieces of paper to either a table top, a window, or another hard surface. The tape will prevent the tracings from moving out of place.

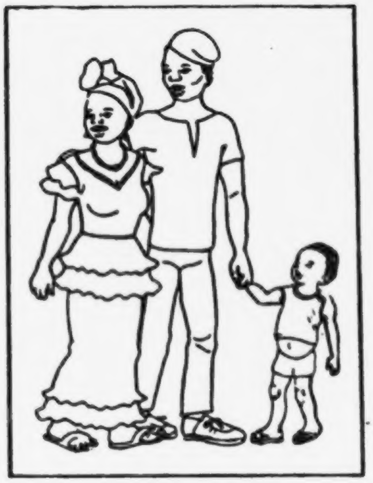
   d. You will see that the little boy's arm is raised too high to meet his father's hand. (See Drawing 12.) You will need to change either the position of the little boy's arm or the position of his father's arm. The little boy's arm will be easier to change because you will have to move it less than the father's arm.

   e. Lightly sketch the new position for the child's arm so that his hand is inside his father's hand. Sketch and erase until you have the child's arm in the correct position.

5. Step three: Sketch the fingers to the father's hand so that it looks like he is holding the child's hand.

   You should now have a new picture of a man, woman, and child! It will probably look something like this:

Drawing 13

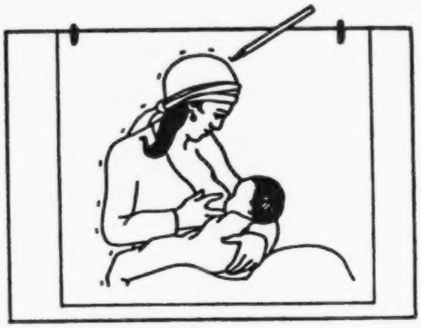


TITLE: TRACING AND SKETCHING TO CHANGE THE SIZE OF A PICTURE

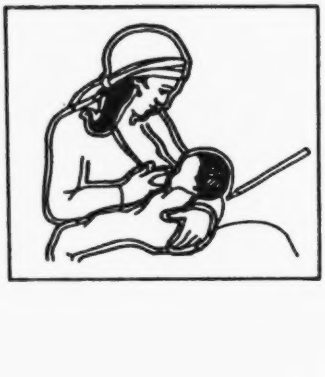
Sometimes you may find 2 pictures to combine to use in a teaching or training session, but they are not exactly the same size. You will have to make 1 of the pictures either slightly larger or slightly smaller than the other.

The simplest way to make a picture slightly larger or smaller is to follow the outline of the picture at a larger or smaller size.

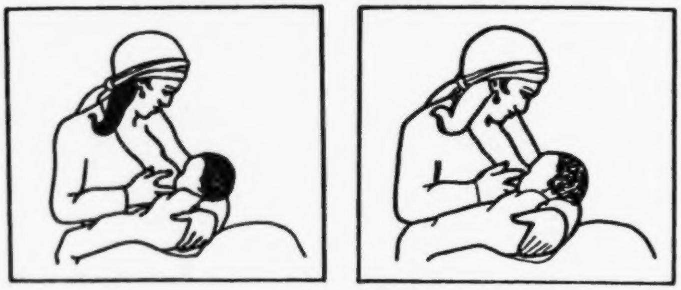
1. To make a picture slightly larger, place a piece of thin, white paper over the picture and attach it with paper clips. Decide how much larger you want it to be. (Remember that this technique will only work for pictures that need to be slightly larger.) You can judge the larger size and mark it on the thin, white paper. If you want to be more exact, you can use a ruler or a piece of wood with the distance marked on it.



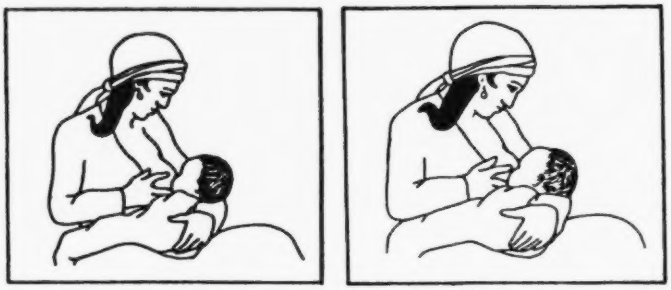
2. At the distance you have decided on, trace outside of the original lines of the picture until you have traced the entire outline.



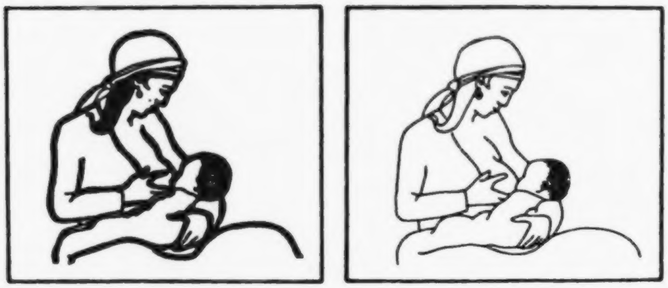
3. If your picture has detailed lines within the person or object, such as facial features, you will have to estimate where the lines should be located in relation to the outline you have already drawn. Look carefully at the original picture, estimate where the lines within the figure should go, and mark them on your thin paper.



4. Compare your larger copy to the original picture. Erase the lines that are incorrectly placed. Sketch new ones until they are correctly placed in the drawing.



5. To make a picture slightly smaller, follow steps 1-4, but trace inside the outline of the original picture at the distance you decide upon.



(INTRAH: Teaching and Learning With Visual Aids. pp.224-253, 269-282.)

ROLE PLAY ON PRETESTING PICTURES

Photographs and pictures must be pre-tested and modified to make certain that they communicate the intended message. Pre-testing can be fairly simple. You can ask a number of people (similar in interests and background to those that you want to reach) to explain what they think is happening in the picture or photograph. Another way to pre-test pictures is through focused group discussion where several people look at the pictures and discuss what's happening in the picture. It is helpful to work in teams so that one person can make notes on the suggestions while the other person asks questions.

First show the picture and ask:
- What is happening in this picture?

Then tell or show the text of the story that goes with the pictures picture and ask:
- What did you learn from hearing or reading the story?

Finally ask:
- How could we improve the picture?
- How could we improve the story?

Pre-testing Role Play Instructions

The role players should create a scene for the role play based on their own experience. They should also create the characters. The viewer role should be a character like someone in their communities with whom they want to communicate through pictures as well as words. The pre-tester role should be a PCV or a counterpart. The pre-tester should ask all the questions listed above, while the recorder completes the pretest form. The role players should follow the pretesting guidelines summarized in the Trainers Note at the end of Step 1.

Session 25

DESIGNING AND EVALUATING HEALTH EDUCATION SESSIONS

TOTAL TIME 4 hours

OVERVIEW

Each health education session in a project must be carefully designed for particular learners and objectives to ensure that the session contributes to overall project objectives. In this training session, a role play provides the basis to discuss ways that adults learn best and how to use the experiential learning cycle to design sessions. Participants critique the design of a session before dividing into small groups to design their own sessions which they will practice in Session 27 (Practicing and Evaluating Health Education Sessions). They also discuss creative ways to evaluate health education sessions and how to organize preparations (materials and facilities) .

OBJECTIVES

- To describe three parts of a health education session and how to sequence them.
  (Steps 1-3)
- To critique the design of a health education session.
  (Step 4)
- To design a plan for one health education session that follows the experiential learning cycle.
  (Step 5)
- To organize preparations for a health education session.
  (Step 6)

Resources - Bridging the Gap. pp. 86-100
- Helping Health Workers Learn, Chapter 1 pp 26-27, Chapter 5, pp. 1-2; Chapter 9, pp. 12-22.
- Teaching and Learning With Visual Aids (INTRAH) Unit 5
- Audiovisual Communication Handbook (In Resource P-8 (Audiovisual/Communication Teaching Aids)

Handouts:
- 25A The Experiential Learning Cycle
- 25B Session Design Assessment
- 25C Guidelines for Session Presentations
- 25D Session Plan Worksheet
- 25E Evaluation of Practice Session
- 25F Session Preparations Checklist

Trainer Attachments:
- 25A Role Play on Ways Adults Learn Best
- 25B Deciding When to Use Experiential Learning
- 25C Sample Session Plan

MATERIALS Newsprint and markers, visual aids for role play, prepared large version of experiential learning circle.

PROCEDURE

Trainer Note

You may want to read the following sections in Helping Health Workers Learn : Appropriate and Inappropriate Teaching, Chapter 1 pages 26-27; Planning a Class,Chapter 5, pages 1-6 and 10-12. In Bridging the Gap see Planning Village Learning Experiences, pages 86-100 as well as the evaluation reading assigned to participants.

Ask two people to prepare for the health educator roles in the role play described in Trainer Attachment 25A (Role Play on How People Learn Best). Work with them to make certain that they clearly demonstrate the contrast between two roles. Also make certain that the facilitator role player includes opening (climate-setting) and closing (closure) activities in the session.

Ask someone to make a large version of the experiential learning diagram shown in Handout 25A (The Experiential Learning Cycle). Ask the person to think of another example of problem solving in daily life, illustrating the four steps in the cycle, to use to explain the cycle to the rest of the group. Work with him or her to make certain that they understand the steps and select a good example to illustrate them.

After this session give participants time to revise their plans and practice their sessions. Make yourself available as a resource person. Ask other trainers to assist as resource persons as well. Prepare a list of suggestions for session topics and a sign-up sheet for practice times.

Step 1
(40 min)

Role Plays on Ways Adults Learn Best

Introduce this step by explaining that the group will be looking at ways that adults learn best and applying those ideas to design a health education session.

Ask the preassigned people to conduct the role plays. Have the group analyze each role play, and ask questions such as the following:

- How did you feel as a learner (community member) in this situation? as a health educator?
- What experiences made it difficult to learn?
- What experiences made you eager to learn?
- What kinds of learning experiences are best for community health education?

- Based on this discussion, develop two lists: "Ways I Learn Best" and "Ways I Learn Least." Discuss which kinds of learning experiences work best in the community and the health center.

Trainer Note

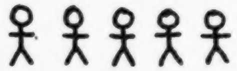
See the final trainer note in this session for an alternative way to do this and the next three steps.

Some of the conditions that help and hinder learning that should come out of the discussion include:

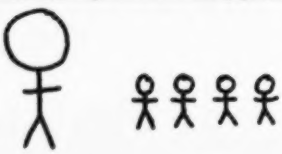
Ways I Learn Best	Ways I Learn Least
I have a say about what I need and want to learn	Teacher tells me what I need to learn
I learn practical useful skills	I Learn ideas, concepts with no practical use
I play an active role (I learn by doing)	I play a passive role (I listen only)
Teacher respects my knowledge and experience	Teacher dominates, talks down to me.

You can use the following stick figures to summarize the discussion:

dialogue approach



expert (top-down) approach



Step 2
(30 min)

Applying the Experiential Learning Cycle

Ask the pre-assigned person to post the diagram of the experiential learning cycle and give their example. Introduce the cycle as a way to design health education sessions based on how adults learn in daily life, that is through experience, reflection and decision and action in solving problems. Distribute Handout 25A (The Experiential Learning Cycle).

Ask participants to think about the role play that they just observed and match the activities of both health educators with the steps in the Experiential Learning Cycle. Discuss and write their responses on the diagram. Refer to Handout 25A to guide them if they have difficulty in this task. Briefly compare the two approaches to community health education. Discuss how they could affect the success of a health education project in a community.

Also discuss the advantages, disadvantages of experiential learning and when to use it in community health education (using Trainer Attachment B, Deciding When to use Experiential Learning). Ask participants to give examples of specific learning situations to illustrate their comments.

Trainer Note

Make sure that the discussion of advantages and disadvantages of experiential learning includes:

Disadvantages

- takes a long time to prepare and conduct.
- villagers cannot dialogue about topics that are unfamiliar.
- requires more skill in working with groups than does lecture discussion.

Advantages:

- based on the knowledge and experience of the learner.
- permits active participation and "hands-on" experience for everyone involved, thus facilitating skill learning.
- encourages villagers to share their problems and work together to identify viable solutions.
- enables the health worker to learn more about the community or group.

Use Trainer Attachment 25B (Deciding When to Use Experiential Learning) to lead the discussion of when to use this type of experiential learning.

Step 3
(25 min)

Anatomy of a Health Education Session

Explain to the group that they have just examined the main body of the health education session - conducting it using the experiential circle. The other two parts of a session are opening and closing. Evaluation happens during the conducting and closing parts of a session.

Ask them to describe what kind of opening and closing activities they saw in the role plays. What did the health educator accomplish? What kind of evaluation ocurred during and after the session? What other kinds of evaluation can be used? Ask them to give other examples of opening, closing and creative evaluation activities from other sessions in this training, and from their reading of Helping Health Workers Learn.

Trainer Note

The outcome of this discussion should be similar to the following points:

- The opening makes people feel comfortable working together as a group with the health educator. It stimulates interest in the session, provides a rationale for the activity and gives participants an opportunity to raise additional concerns and ask questions about the objectives of the session. If the session follows previous session, the opening also links the session to what has gone before it.
- The closing briefly summarizes the events of the session, links back to the objectives to see if these were accomplished and wraps up the session with a sense of completion. If the session is part of a series, the closing also links the session to future sessions.

Be sure that the participants discuss some specific examples of ways to open and close sessions.

Encourage the use of creative and active evaluation techniques such as those discussed in the pre-assigned reading in Helping Health Workers Learn.

Step 4
(30 min)

Session Critique

Ask participants to summarize the objective and activities for one of the health education sessions that they just reviewed. List these.

Distribute Handout 25 B (Session Design Assessment Sheet). Read through the form with them and allow time to discuss and modify the questions. Ask the participants to fill in the sheet to provide a basis for the group discussion and critique of the sessions.

Trainer Note

As an outcome of the critique, emphasize the need to ask the following questions when designing a health education session:

- WHO are the learners? (for whom is the session intended? What do they know about the topic of the session? What are their current beliefs and practices regarding this topic? What do they want to learn?)
- WHAT RESULTS do you and your Counterparts expect? (What are the objectives for the session? What changes do you expect in knowledge, skill or attitudes as a result of the session? How will this session help accomplish the objectives of the larger health education project?)
- WHEN, WHERE and for HOW LONG will you conduct this session?
- What TECHNIQUES and MATERIALS will you use? (what nonformal education techniques and visual aids are most effective for the types of learning specified in the objectives and the time available for the activities? How experiential should the session be?)
- Does the session include all the necessary parts? (opening, conducting, closing).
- How will you and the learners EVALUATE the session? (how will you learn what worked well and what needs improving before the next session?)

Emphasize the importance of working with community members and local health workers to answer these questions, and develop the session.

If time allows, you may want to critique another session from the present training to make sure that participants relate the discussion of session design and evaluation to their own experience as participants in this training course.

Step 5
(40 min)

Small Group Planning Activity

Explain to the participants that they will be applying what they have learned in this and previous sessions to design and conduct a health education session with the partner with whom they worked to develop a project plan. Tell them that you will give them some worksheets to help them plan and practice for this activity, and then they will spend the rest of this session planning and preparing. Tell them that you and the other trainers who have agreed to help will be available to answer questions and listen to ideas during the planning time. Distribute Handout 25C (Guidelines for session preparation and review each point with the group. Allow time for questions.

Distribute Handout 25D (Session Plan Worksheet). Note that this includes the kinds of questions that they have just listed in their discussion (asking who, what, where, when etc.) You may want to give the example from Trainer Attachment 25C (Sample Session Plan) to illustrate what kinds and how much information to include on their worksheet. Allow time for questions and an opportunity to modify the worksheet.

Post and discuss a list of ideas for topics for the practice sessions. Also post a sign-up sheet for session times. Ask participants to sign up, listing their topics and names. An alternative is to write times on slips of paper, fold them, and have each pair draw one from someone's hand or a hat.

Step 6
(20 min)

Discussing How To Prepare for a Session

Distribute Handout 25E (Evaluation of Practice Session). Discuss the evaluation criteria, modify if necessary and suggest that participants use these guidelines as they plan and prepare for their sessions, particularly the criteria for effective facilitation (#1 What did the Facilitator do?).

Distribute Handout 25F (Preparations Checklist). Explain that this is one of many ways to plan how to carry out a health education session. Ask participants to share any examples from their experience. Discuss the form modify it if necessary. Encourage them to use the forms to prepare for their own sessions.

Close the group work part of the session by asking one or two people to describe how they plan to use what they learned in this session to design their own session.

Trainer Note

You may want to enlist the help of a few participants to prepare a list of suggestions for session topics using the problems and projects identified in other sessions. You can use the technical modules in this manual as a source of technical content and ideas for session topics.

You may want to encourage groups to select different topics so that there will be a variety of activities developed for everyone to try out in their host communities. You will probably want to arrange to have the final health education session plans duplicated so that each trainee can have the full set of sessions.

Re-emphasize the importance of community involvement in designing community learning experiences. For this training that may be limited to talking with the host family if the training is a live-in situation , or talking with housekeepers, cooks, or other project staff. For inservice training it is preferable to ask participants to do some preliminary information gathering on health problems, practices and attitudes before they attend the training course.

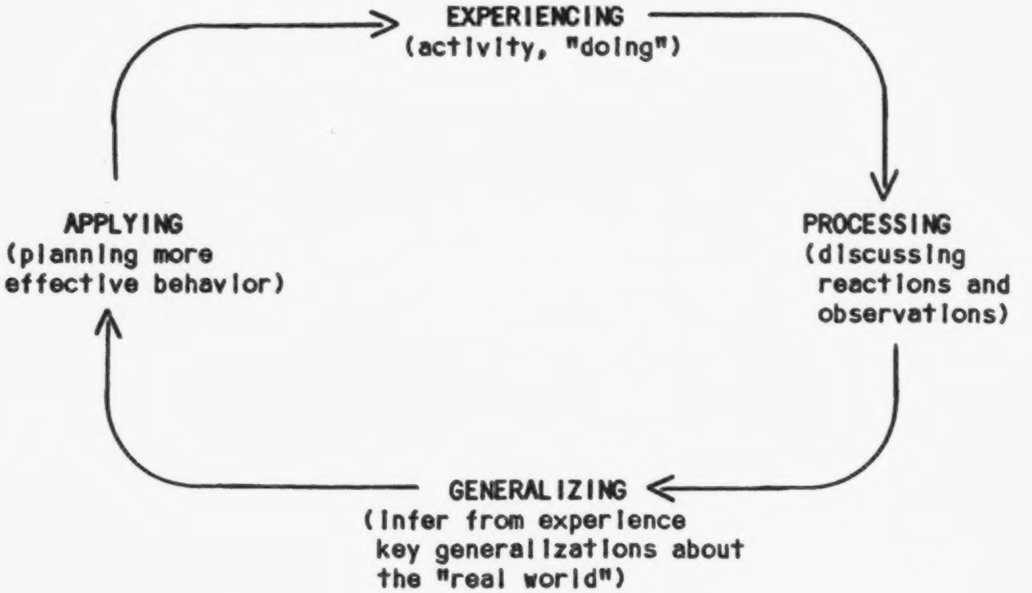
Possible Adaptations for This Session

An alternative requiring less time but less effective than the role play activity used in step 1 is to ask participants to think about one of their best and and one of their worst experiences as learners. Ask them to discuss what made the good experience good and what made the bad experience bad. Make two lists of their ideas about "ways we learn best" and "ways we learn least".

It is important to keep in mind that this adaptation affects steps 2,3, and 4 as well. You will need to use one of the sessions in the training as a basis for participants to complete those steps. You can refer back to the last session in the training and ask participants to summarize the objectives and activities before they identify the experiential learning cycle steps (step 2) identify the parts of the session (Step 3) and critique the session (Step 4).

THE EXPERIENTIAL LEARNING CYCLE

The experiential learning cycle is based on the way that people gain new skills or information and solve problems through daily experiences ("experiencing"), interpret those experiences ("processing"), draw generalizations from them ("generalizing"), and determine how to make use of the learning in daily life ("applying").


EXPERIENCING
(activity, "doing")
PROCESSING
(discussing
reactions and
observations)
GENERALIZING
(infer from experience
key generalizations about
the "real world")
APPLYING
(planning more
effective behavior)

EXAMPLE from daily life

Experiencing: A woman watches her sick child revived by ORS given first by the health worker and then by her after the health worker taught her how to mix and give it.

Processing: The woman thinks about the recovery of her child, how difficult it was to pay for the packets and to remember how to mix it. She also thinks about the child who died last year of the same sickness. She discusses these thoughts with her sister.

Generalizing: The two ladies conclude that the ORS drink is well worth the cost and effort because it can save their children's lives.

Applying: They plan to go the the clinic and get ORS packets again the next time their children have that sickness. Using the ORS packets again will be another experience, starting the cycle over again.

Session 25, Handout 25B
Page 1 of 2

SESSION ASSESSMENT SHEET

Session Title:____

Please fill in the ratings and provide short answers to the questions below. Give specific examples whenever possible.

1. The objectives for this session seemed:

1	2	3	4	5
Mostly Irrelevant to Learners		Somewhat Relevant		Very Relevant to Learners

Because____

____

2. This session accomplished the objectives:

1	2	3	4	5
Not at all		Somewhat		Entirely

Because____

____

3. For the learners, the activities used during the session were:

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because____

____

4. The opening for the session was:

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

5. The conducting part of the session was:

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because____

____

6. The conducting part of the session included the following parts:

Experiencing:	Processing:	Generalizing:	Applying:
Yes___ No___	Yes___ No___	Yes___ No___	Yes___ No___

Comments____
____
____

7. The visual aids and handouts were:

1	2	3	4	5
Nearly Useless		Somewhat Useful		Very Useful

Because____
____

8. The time allowed for activities in this session was:

1	2	3	4	5
Too long		Just Right		Too Short

Because____
____

9. The evaluation activities used during and after the session were:

1	2	3	4	5
Very Ineffective		Somewhat Effective		Very Effective

Because____
____

10. The best thing about this session was:
____
____

11. This session could be improved in the future by:
____
____
____

GUIDELINES FOR HEALTH EDUCATION SESSIONS

- Choose a content area that is relevant for you and your group, based on your analysis of health problems, the session should contribute to the objectives of the project that you planned.
- The session should be practical; it should reflect a real community situation and offer a model for activities that you can use in the future.
- The session is for "doing" not just talking about what you plan to do. The rest of the group and staff members will be your participants. Hence, we will not "hear" about your designed session, we will experience it as your group.
- Work out a brief activity that you can complete in 20 minutes. (Don't end up rationalizing, "If I'd had more time...."). To give everyone an equal opportunity we will stop your activity when your allotted time is over.
- Prepare a session plan that can be reproduced for distribution to everyone later. Use Handout 23 C (Session Plan Worksheet).
- At the beginning of your session, set the stage by explaining the health education situation for which you designed the session. Prepare a large version of the session plan to use to introduce your session. Be sure to explain how this session will contribute to your larger project objectives
- Make the activities as creative as possible while keeping in mind that methods and materials must be culturally appropriate.
- Use the handouts and ideas from discussions throughout the training sessions and explore new ways of combining materials and techniques.
- Use your co-participants, trainers and local community people as resources during the planning and preparation time. "Bounce" your ideas off others.

Session 25, Handout 25D

SESSION PLAN WORKSHEET

WHO are the learners?

WHAT is the OBJECTIVE of the Session?

WHERE will the session take place?

WHEN will it take place?

HOW will you conduct the Session?

Skills/ Knowlege attitudes needed	Activities	Time	Materials needed	Evaluation

EVALUATION OF PRACTICE SESSION

Date________________

Facilitator____

Number and Type of Participant______________________________

Objectives & Activities_____________________________________

______________________ Materials used:___________________

1. What did the facilitator do?
(Check appropriate items)
    Set an appropriate climate for learning ______
    Spoke clearly ______
    Moved the session along at a good pace ______
    Listened and asked questions ______
    Guided the activities ______
    Stimulated and encouraged discussion ______
    Had the participants use the materials ______
    Listened and participated in a discussion of problems ______
    Was well organized throughout the session ______
    Used visual aids effectively ______

    Others:____

    ____

2. What was the participation of group members?
    Took active role in the activity ______
    Answered questions ______
    Made observations ______
    Shared ideas and experiences ______
    Discussed a problem or felt need ______
    Showed enthusiasm ______

    Others:____

    ____

3. How well was the session designed?
    Followed the experiential learning model ______
    Had a logical sequence of activities ______
    Included start-up and closure ______
    Included peer learning ______
    Used methods appropriate for learning the content information ______
    Accomplished objectives
    Appropriate choice of visual aids ______

    Others:____

    ____

SESSION PREPARATIONS CHECKLIST

Type of Resource	List of Items	Persons Responsible	Item Prepared
Permission to Hold HE Session			
Place to Hold Session			
Session Facilitators			
Chairs, lights, tables, etc.			
Equipment			
Publicity about the Session			
Supplies			
Visual Aids			
Clean up			

ROLE PLAY ON WAYS PEOPLE LEARN BEST

Purpose:
This role play provides a concrete immediate experience to use as a basis to identify the basic elements to include in designing good health education sessions. Because several steps of the session rely on the role play as a focus of discussion,it is particularly important to work with the role players priòr to the session and make certain that they are prepared to include all the necessary aspects of their roles.

The Setting:
A rural community in the country where participants have been assigned. Villagers have little income, little education and generally poor sanitation. Their experience with health educators to date has been that the educators tell the villagers what to do to improve the health in the community but discourage any suggestions from villagers about needs and solutions.

Health Educator One, The Expert
This role shows the top down approach to health education. The role player's actions should reflect the following outlook.

- the health educator knows what is good for the villagers
- The villagers are considered ignorant
- The information flows from the health educator to the village
- The health educator provides answers, solutions to village problems
- According to this health educator ," a villager who refuses to follow recommended practices is like a sick man. You have to force him to eat and he will thank you when he becomes better."
- The health educator assumes knowledge can be poured into adult learners like a tea cup.
- Villagers must be manipulated to change behaviors to accomplish government health goals.

Health Educator Two, The Facilitator
This role illustrates the community dialogue approach to health education. The role player's actions should reflect the following outlook.

- The health educator assumes that villagers know something about health and have reasons for their practices based on experience.
- The health educator shares knowledge
- The health educator helps villagers identify and critically reflect on problems on their own
- The health educator shows the relevance of what is known to what is being learned.

Both role players may want to refer to Helping Health Workers Learn Chapter 1 pages 1-3, 17-23 for ideas about acting out their roles.

Ask the participant who plays the facilitator role to include an opening and closing in the session (as described in Step 3). Also ask that person to use one of the evaluation techniques shown in Helping Health Workers Learn, chapter 9, pages 13-21.

The Villagers
Ask the rest of the participants to play the role of the villagers using the description of the setting as a guide.

Sample Health Message
Ask the role players to present one short simple health message, preferably using pictures. For example, the expert could present the message: "let us clean up rubbish in our yards to make the community healthier" as a command, showing a picture of a dirty village and another of a clean village. The facilitator could use the same two pictures to stimulate discussion about what is happening in the two pictures and what application it might have to the local community, to help the community identify their problem and decide what action to take.

DECIDING WHEN TO USE EXPERIENTIAL LEARNING

The following questions provide guidelines for deciding when to use experiential learning and when to blend it with more lecture-oriented learning for a particular situation.

1. How will the learner use what is learned? If the learner needs to apply what they learn to solve problems or do something, a more experiential approach is needed. If the learner only needs to remeber the information, a more lecture-oriented approach can be used.

   Example:
   If the learner needs to correctly mix oral rehydration salts, demonstration and supervised practice are needed. If the learner wants to know about why ORS works, a talk with visual aids and discussion could be effective.

2. How often will the learner use what has been learned? The more often they will use it, the more experiential the learning should be.

   Example:
   If health workers will be recording children's height and weight on a growth chart daily, they need a demonstration, and supervised practice to learn how to do this. If health workers assist the head nurse once a year in preparing figures for the annual disease surveillance report, a talk reviewing the report form followed by a question and answer period will orient the nurses to the surveillance report task.

3. Will the learner need to adapt what is learned to different situations or use the learning as is? If flexible use of learning is necessary, a more experiential approach is needed.

   Example:

   A healthworker who needs to be able to counsel different women in different ways about family planning methods needs to practice counseling in a situation where she can get feedback from others. A health worker can learn how to complete a standardized medical history form through a brief talk, demonstrating how to complete the form and a handbook that overviews the information needed for each answer on the form.

4. Is the learning likely to be disconserting or confusing to the learner? If yes, a more experiential learning activity is required. Deciding what will be disconcerting and confusing requires knowing the community well.

   Example:
   In a community that already accepts the importance of immunizing children, but resists the idea of child spacing, the latter topic would require' a more participatory approach such as using a series of pictures to stimulate discussion about the problems associated with having large families. Information about the schedule for the next visit of the mobile immunization team could be announced by the village crier and during a village meeting.

5. Is the learning completely new, foreign possibly requiring unlearning things previously learned? If yes, then more experiential learning is needed.

   Example:
   In many communities the idea of giving a baby liquids during bouts of diarrhea goes against traditional practices of witholding water to stop diarrhea. A participatory technique,such as having mothers or children draw a "baby" on a plastic bag or a gourd and poke a hole in it, and pour in water as a basis to discuss what happens to the baby if you don't continue giving it water, can help people "unlearn" the practice of witholding water. If breastfeeding is commonly continued when an infant is sick, it is usually sufficient to praise the mother and encourage her to continue this practice.

6. Add other examples from your own experience and encourage participants to add some as well.

(Adapted From: C. R. Bell and R. Margolis, "Blending Didactic and Experiential Learning Methods")

SAMPLE SESSION PLAN

Mrs. Malinga is a nurse in charge of a family health clinic in a rural district. She supervises six traditional birth attendants (TBAs) who work and live in the communities surrounding the clinic. Every two weeks the TBAs walk to the clinic and meet Mrs. Malinga to turn in their records of the mothers they have visited and the clinic referrals they have made. Mrs. Malinga also uses this day for in-service training or discussion sessions with the group of TBAs. By the time the TBAs arrive at the clinic and discuss their visits and referral records with Mrs. Malinga, they only have about 2 hours left for the in-service training sessions. Then they must leave if they want to reach home again before dark.

Over the past few months, the TBAs have helped Mrs. Malinga make up stories stories and pictures to use during the home visits to teach mothers about infant nutrition in pregnancy, and the ante-natal clinic visits. Mrs. Malinga field tested the pictures with the mothers in the clinic and drew and colored the final series of pictures on heavy cards herself. This week, Mrs. Malinga is planning a session for the TBAs on how to use the picture series they have helped develop with the three health stories.

The following is Mrs. Malinga's session plan for this week.

WHO ARE THE LEARNERS? - six traditional birth attendants

WHAT is the OBJECTIVE of the Session? - To effectively use the sets of pictures they have developed as a basis for storytelling with mothers during home visits.

WHERE will the session take place? - In the clinic

WHEN will it take place? - During the regular reporting visit of the TBAs.

HOW will you conduct the session?

Skills/Knowledge Attitudes Needed	Activities	Time	Materials Needed	Evaluation
Objectives for the session	Greeting, looking at the pictures reviewing the objectives	10 min	sets of pictures on: -infant nutrition -nutrition in pregnancy -ante-natal clinic visits	
Ways to use picture stories to motivate mothers	Discussion, demonstration	15 min	one set of pictures	
How to use pictures in storytelling about health	participants practice storytelling pairs	45 min	all 3 sets of pictures	During session observe skills in practicing the use of the pictures and answering the mother's questions.
Application of this skill	Discussion of problems in using storytelling Plans to use storytelling in the community	20 min		After the session -count number of mothers who attend the pre-natal and ante-natal clinic. -count numbers of cases of malnutrition at the clinic.

Session 26

RESOURCES FOR HEALTH EDUCATION

TOTAL TIME 1 hour

OVERVIEW Before participants finish the health training program, they need an opportunity to learn about potential resources for health education outside the training site. This session begins with identification of human and physical resources in the capital and regional centers of the host country. Participants discuss when and how to link people in their host communities with these resources. They also explore ways they can continue to exchange information and project success stories after they go to their posts.

OBJECTIVES

- To identify individuals, organizations, and other sources of materials, equipment and assistance for health education in the host country.
  (Step 1)
- To describe when and how to link community members with resource agencies
  (Step 2)
- To develop a means for participants to continue exchanging information after the training.
  (Step 3)

RESOURCES Community Health Education in Developing Countries. (Peace Corps) pp. 179-186.

Handouts:
- 26A List of Organizations With Resources for Health Education (to be developed by the trainer)
- 26B Networking

Trainer Attachment:
- 26A Linking the Community with Outside Resources

MATERIALS Newsprint, markers, examples of resources available from local organizations.

PROCEDURE

Trainer Note

Prior to this session compile a list of individuals and organizations that have resources on health education. Ask some of the participants to help you with the list and in collecting examples of materials available from those places. Many times you will find someone in one of the organizations who has already compiled a list that you can expand. Be sure to include the name of the organization, the name of a person to contact there, what is available, and what is necessary to get or borrow those items (such as a letter of request). Also invite a few people from organizations with resources to visit the training session to discuss and demonstrate their resources. Ask one of the participants to arrange these resources in a display in the training room.

If the local Peace Corps office circulates a regular newsletter to Volunteers, bring copies of the newsletter as a possible resource for information exchange after the training. Invite some first and second year Volunteers to attend the session to share their ideas and experiences.

Step 1
(20 min)

Identifying Resources

Introduce the session objectives and the visitors. Distribute Handouts 26A (List of Organizations With Resources for Health Education) and 26B (Networking). Ask participants and visiting Volunteers to add to the list. Ask the Volunteers to describe some of their experiences getting and using resources from these agencies. Give the participants time to ask questions.

Trainer Note

If it is possible to invite representatives from resource agencies, follow the session format used in Session 7 (The Role of the Peace Corps Volunteer in Primary Health Care). This discussion should also stimulate thinking about ways available materials can be used in community health education.

Step 2
(20 min)

Linking the Community with Outside Resources

Tell one of the stories in Trainer Attachment 26A (Linking the Community with Outside Resources). Also ask the Volunteers visiting the session to share some of their own stories. Use some of the following questions to discuss ways the story offers lessons for them.

- What are some of the things that the health Volunteer could have done to make a better link between the community and the resource agency?
- What are some of the disadvantages of linking people in the community with outside resources? What are the advantages?

Trainer Note

The main points that should come out in the discussion are:

- Don't get a resource for people if they can get it themselves. Encourage self-reliance.
- Don't get outside resources if the resources exisit within the community.

Rather than doing all the work for the community the Volunteer in the story could have provided information about resources like the information in the list in Handout 26A (List of Organizations with Resources for Health Education).

Step 3
(20 min)

Discussing Ways to Exchange Ideas

Spend 10 minutes brainstorming all the possible ways for participants to continue exchanging ideas and information after they go out to their posts.

Have the group review the list and pick the item most likely to succeed. Make a list of what needs to be done and ask for volunteers to be responsible for specific tasks to set up a means of exchanging information. Have them set some dates for completing the tasks.

Trainer Note

Participants in other workshops have suggested ideas such as the following: a newsletter, a column in an existing newsletter where they can share project successes and failures, visiting each others sites and helping out with large projects, exchanging visual aids made locally, having a conference every six months after the training to exchange ideas and learn more about health care.

NETWORKING..

- puts you in touch with other women concerned about the same issues;
- gives you specific information which you won't find in the "mass media";
- gives you a "broad" picture of the issue you are dealing with;
- informs you how other individuals or groups are resolving the problems;
- provides you with names of people and/or organisations who may help you by providing technical or financial assistance;
- assures you that you are not acting in isolation, but are part of a larger group struggling with similar issues;
- informs you of various options or directions you have before you;
- pools efforts and energies to create a collective front to problems;
- gives greater visibility to the issue through collective action;
- informs you of training opportunities, workshops, meetings, which may be of interest;
- gives you new ideas and perspectives on a problem;
- provides a channel of communication at local, national, regional, or worldwide levels.

NETWORKING EXISTS.. **USE IT!**

Networks within the broad area of "development" are numerous and wide-ranging in terms of their geographical and subject interests. There are many that are well-established and have access to financial, material and human resources that you should know about These networks can be divided into the broad categories of:

TYPES OF DEVELOPMENT NETWORKS

1 REGIONAL NETWORKS of individuals/groups whose interests and expertise are centred on general issues affecting a particular geographic area;

2 SUBJECT-SPECIFIC NETWORKS of individuals/groups whose interests and expertise are focused on particular disciplines, such as health, training, appropriate technology, etc.

3 PROFESSIONAL NETWORKS of individuals/groups who share information about their specialty areas, such as health professionals, journalists, community development workers, independence movements, etc.

4 FUNDING NETWORKS which include the wide-range of organisations (international development agencies, United Nations agencies, foundations, governmental and non-governmental organisations) that are in some way involved with contributing money to development projects.

5 ORGANISATIONAL NETWORKS of individuals within the same organisation, frequently with different expertise and working at different levels, who share a common concern which is based within the operational function of that organisation.

Within the five categories, there is a great deal of cross-over, and becoming familiar with one network often leads to familiarity with others. In this way they all become potential sources of: (1) information; (2) technical assistance and training; (3) professional development; (4) wide-ranging support, sometimes in a financial sense, sometimes in the form of advice or valuable referrals.

NETWORKING CAN BE:

- formal, with a definite organisational structure and a well-planned, well-financed programme of action; or
- informal, a coming together of women to share mutual interests and concerns, meeting when the need arises and lacking a structure or mode of operation; it can be,
- unseen and invisible;
- conscious or unconscious.

NETWORKING CAN BE:

- personal, to achieve personal growth and development objectives;
- political, to mobilize action around a specific issue; or
- professional, to link people with similar professional interests.

NETWORKING CAN BE:

- international, joining women from different regions of the world;
- regional, based on problems unique to a particular region;
- national, bringing women together based on concerns unique to conditions in that country, such as legal or economic problems;
- local, links women within a community for action on a specific issue of local concern.

NETWORKING CAN BE:

- individual, putting one person in touch with another person with similar interests, these people may have similar professional skills, or they may have different skills which are complementary and necessary for resolving a problem; or
- institutional, among organizations which have agreed to join forces in resolving a common problem.

HOW CAN YOU START MAKING CONTACT ?

♀ TALK with people in your community or with whom you work. Ask for names and addresses of individuals/groups involved in projects similar to yours.

♀ TALK or write to government ministries, university personnel, and non-governmental organisation personnel in your area. Try to learn if they are networking and, if so, with whom.

♀ LOOK AT directories, resource books, informational brochures, etc. to locate additional names and addresses of people you should know about.

♀ WRITE letters requesting information from groups/individuals you've identified. When possible, a personal visit is most effective. REMEMBER, whenever you talk or write to anyone, ask for additional names of individuals/groups that you should be in touch with, as well as their suggestions for resource materials that will help you uncover more network members.

♀ SEND any publications, notices, or materials that you produce or that describe your organisation, project, or interests. Ask that you be put on their mailing list to receive their free publications regularly. If you have regular publications, ask them if they would be interested in establishing an exchange agreement with you.

♀ ASK for advice from groups you've learned about, and begin exchanging materials. This strengthens the process of building an information and contact base that is so important to good networking.

♀ INVITE people or groups you are in contact with to drop in on your organisation or project when they are in your area.

♀ ATTEND conferences, seminars, and workshops at which the people with whom you've begun to network will be present, particularly regional meetings.

(From:"International Women's Tribunal Center Newsletter" No.13, 1980)

LINKING THE COMMUNITY WITH OUTSIDE RESOURCES

Story Number One: Debra and the Well Project

Debra, a health Volunteer, was eager to help the community solve the problem of lack of reliable clean water. She volunteered to go to the capital city to search for help from the Ministry of Public Works. The official at the ministry gave Debra plans for digging the well. He promised to help with costs and supplies if the villagers dug the well according to the plan.

The villagers were happy with Debra's report about the official's promise to help. With her assistance they organized a work schedule and began digging the well according to the plans. Before they reached half the depth required by the plan they struck water and could not dig any farther.

Debra returned to the ministry and found the official. He was no longer helpful. Instead he said he could not give any help now because the villagers did not dig the well according to the plan.

Debra returned to the village and reported the bad news to the villagers. They became angry and accused her of lying to them about the official's first offer of help. Debra did not know what to do next. The villagers were no longer willing to work on projects to improve community health.

Story Number Two: David and the Health Post Project

David, a health volunteer, talked with the village health committee about the health needs of the community. The commmittee members said that nearly everyone in the village wanted a health post because the nearest post was a four hours walk away. They insisted that if they could get the money to buy supplies, the villagers would provide the labor to build the health post. David promised to help. He went to the Ministry of Public Works and found the section that gives loans for village construction projects, He got the request forms for the loan and helped the health committee fill them out. Then he returned to the ministry and collected the loan for the committee.

Before the time to repay the loan came, David's completed his second year as a Volunteer and returned to the United States. When the loan was due the health committee did not understand how to repay the money. Only David knew about the resources in the ministry. Finally an angry official from the ministry collected the money. The village did not complete the health post because they needed more supplies and did not want to deal with the angry official to get another loan.

Session 27

PRACTICING AND EVALUATING HEALTH EDUCATION SESSIONS

TOTAL TIME 3 hours

OVERVIEW It is always helpful to try out a planned activity on a group willing to offer suggestions about what is good about the activity and what could be improved. The presentations provide a means of sharing ideas and approaches that can be used by all the participants when they go to their work sites. Conducting health education activities also gives trainees a sense of accomplishment and a means to assess what they have learned about health education in the past few days. Finally it provides practice in giving constructive criticism. In this session, co-facilitators present their project plans and conduct the health education session that they planned earlier in the training. Following each session the participants evaluate their peers' work.

OBJECTIVES

- To conduct a 20 minute health education session, working in pairs.
(Step 1, 2)
- To evaluate the health education session using criteria established during the training course.
(Step 2)

RESOURCES As determined by participants.

Handouts:
- 25C Guidelines for Practice Sessions
- 25C Evaluation of Practice Session
(both from Session 25)

MATERIALS As determined by participants.

PROCEDURE

Trainer Note

Prior to this session, emphasize the importance of practicing before carrying out the session. Also urge participants to organize the materials needed for the session so they can reach them easily when they need them during the session.

You may want to invite some community members to attend the presentations to have a more realistic try out of the session Another alternative is to combine these activities with Session 17(Community Health Day).

Try to "let go" and give participants as much freedom as possible to set the overall tone and present these activities. You may want to ask someone to act as moderator for the session.

It is usually best to appoint a timekeeper so that none of the activities run over the time allocated. It is also helpful to the presentors to know when they have only five minutes left in their session.

Unless the group is small, it will be necessary to schedule two concurrent sessions with at least one trainer observing each session.

Step 1
(15 min)

Setting up the Format for Practice Sessions

Assemble the group and explain the procedure for the practice sessions. Each pair of participants will conduct their 20 minute session according to the schedule posted on the wall. Immediately afterwards, the trainer will facilitate a 15 minute evaluation of the session among all participants and staff.

Ask each group to begin their session with a brief review of their health education project plan and explain where their practice session fits into that overall plan. Ask them to post large versions of their project plans and session plans. Remind them to explain how they plan to evaluate the session.

Distribute several copies of Handout 25E (Evaluation of Practice Session) to each participant. (Each person should have as many copies as there are practice sessions.)

Step 2
(1 hr 30 min)

Facilitating and Evaluating Practice Sessions

Have participants conduct their sessions. After each one, facilitate a 15 minute evaluation of the session. Encourage discussion of ways the session could be adapted for different situations.

Trainer Note

The following is a suggested evaluation procedure for the evaluation phase after each session:

- The pair who facilitated the session begin the process with self-evaluations.
- The participants then provide commentary identifying effective and non-effective aspects of the session and giving suggestions for improvement.
- As appropriate, the trainer provides feedback in areas not yet mentioned by participants and gives his or her response to what has already been said.

Step 3
(25 min)

Applying New Ideas to the Field

Ask the group to reflect on the new ideas and information they gained during the practice sessions. Have them briefly discuss how they might use or adapt the new session strategy for specific opportunities and situations in the field.

Trainer Note

Display the visual aids and plans produced for these activities. If possible, duplicate the plans for each project and session so that each participant has a copy of all the plans.

Since 1961 when the Peace Corps was created, more than 80,000 U.S. citizens have served as Volunteers in developing countries, living and working among the people of the Third World as colleagues and co-workers. Today 6000 PCVs are involved in programs designed to help strengthen local capacity to address such fundamental concerns as food production, water supply, energy development, nutrition and health education and reforestation.

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